New Metriorrhynchine taxa from New Guinea (Coleoptera: Lycidae)

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Abstract: Forty six new species of metriorrhynchine net-winged beetles - *Cautires brunneus*, *C. dituaoides*, *C. eniclasoides*, *C. extraneus*, *C. ignotus*, *C. miklukhomaklaii*, *C. picipennis*, *C. tricoloripennis*, *Cladophorus anggiensis*, *C. avicollaris*, *C. bupuensis*, *C. carbonipennis*, *C. flavoscutellatus*, *C. grekeae*, *C. halmaheraensis*, *C. holynskii*, *C. humeralissimus*, *C. lacrimosus*, *C. maurokitrinus*, *C. maurus*, *C. nabirensis*, *C. nimbus*, *C. obiensis*, *C. pusspenssatensis*, *C. telnovi*, *C. tertius*, *C. weigeli*, *Malacolycus gigiensis*, *Metriorrhynchus cochleiformis*, *M. uperensis*, *M. vitiosus*, *Porrostoma cautiromimum*, *P. exile*, *P. fuscum*, *P. gigivagum*, *P. mutum*, *P. mystax*, *P. semiflavum*, *Procautires cirratus*, *P. fuscicolor*, *Pseudodontocerus gigilacus*, *P. hilaris*, *P. incultus*, *P. maculihumeralis*, *P. variicornis* and *P. villosus* spp. nov. - are described from New Guinea and adjacent islands. *Cladophorus fuscatus* Waterhouse, 1879 is transferred to *Pseudodontocerus* as *Pseudodontocerus fuscatus* (Waterhouse, 1879) comb. nov. and *Cladophorus loriae* Kleine, 1926 is transferred to *Porrostoma* as *Porrostoma loriae* (Kleine, 1926) comb. nov. *Cautires maturnus* Kleine, 1926, *Cladophorus formosus* Guerin-Meneville, 1830, the type species of the genus, and *Pseudodontocerus fuscatus* (Waterhouse, 1879) are illustrated.

Key words: Coleoptera, Lycidae, Metriorrhynchini, new species, Papuan region.

Introduction

The Metriorrhynchini are by far the most diverse and species-rich group of net-winged beetles in New Guinea (Kleine 1926, 1933) and account for more than half of the described taxa of the region's lycid fauna.

An opportunity to study the vast Lycidae collections of the Institut Royal des Sciences naturelles de Belgique, Bruxelles, the Erfurt Naturkundemuseum and the Entomological Society of Latvia has already led to publication of several papers on Metriorrhynchini of New Guinea (Kazantsev 2007, 2010, 2015a, 2015b, 2016a, 2016b). In a further contribution to the knowledge of this group another forty six new to science metriorrhynchine species from seven genera, *Cautires* Waterhouse, 1879, *Cladophorus* Guerin-Meneville, 1830, *Malacolycus* Kleine, 1943, *Metriorrhynchus* Gemminger, Harold, 1869, *Porrostoma* Laporte, 1838, *Procautires* Kleine, 1925 and *Pseudodontocerus* Pic, 1921, are described.

Materials and methods

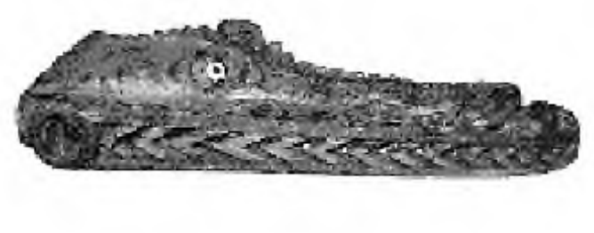
Collecting methods yielding all several thousand net-winged beetles from the Institut Royal de Sciences naturelles de Belgique collection were light traps and canopy fogging. Collecting methods used by Dr. D. Telnov and other members of the Entomological Society of Latvia expedition to New Guinea included beating from lower vegetation and branches, as well as collecting at white light.

The studied specimens were pinned or glued on cardboard or transparent plastic mounting plates. For detailed examination they were relaxed in water; then the detached ultimate abdominal segments were treated for several hours in 10% KOH at room temperature, then the extracted genitalia were placed in a microvial with glycerin and photographed; finally, glued back on mounting plates. Some aedeagi with evaginated and fully membranous inner sac were put in water for photographing, as in glycerin these delicate structures tended to get squeezed.

MSP-1 zoom stereoscopic dissecting microscope with x8 – x80 magnification range was used. Photographs were taken with Canon EOS 6D camera and Canon MP-E 65 mm lens.

Abbreviations used in the text:

DTC – Collection of Dr. D. Telnov, Rīga;
ICM – Insect Center, Moscow, Russia;



ISNB – Institut Royal des Sciences naturelles de Belgique, Bruxelles;
NME – Naturkundemuseum Erfurt, Germany.

Taxonomic part

Cladophorus Guerin-Meneville, 1830

Cladophorus Guerin-Meneville, 1830: plate II, fig. 9.
Type species: *Cladophorus formosus* Guerin-Meneville, 1830, designated by Waterhouse, 1878
= *Odontocerus* Guerin-Meneville, 1830: 72.
Type species: *Cladophorus formosus* Guerin-Meneville, 1830, designated by Bourgeois, 1892.

Notes: Several dozen *Cladophorus* species are known from New Guinea (Kleine 1926; 1933; Bocák 2002). The genus may be distinguished by the flabellae stemming not from the bases, but from the apices of relevant antennomeres, mostly cylindrical and narrowed distally median lobe of their aedeagi with stout leathery phallobasal membrane (Plate 62 figs 1-3).

The genus *Cladophorus* appears to have two principal morphological types, the *formosus* type, i.e. of the type species of the genus, characterized by the elongate bipod inner sac structure of the median lobe of the aedeagus (e.g., Plate 62 figs 2-3, 5-6) and the *carbonipennis* type, with a scissors-like inner sac structure (e.g., Plate 69 figs 8-9). At the same time the scissors-like inner sac structure is not infrequent in New Guinean species attributed to *Cautires* Waterhouse, 1879 (e.g., Plate 76 figs 5-7) and *Pseudodontocerus* Pic, 1921 (e.g., Plate 72 figs 5-6). Apparently, the relationships between *Cladophorus* and related genera, including *Cautires* and *Pseudodontocerus*, need to be reinvestigated on the basis of a comprehensive phylogenetic analysis, preceded by more alpha-taxonomic studies.

Distribution: Papuan and Australian regions.

Cladophorus avicollaris sp. nov. (Plate 62 figs 4-6)

Holotype ♂ NME: E Indonesia, West Papua, S Bird's Neck, 7-9 km NW Kaimana, 03°35'02"S, 133°42'58"E, 25-200 m, primeval rainforest on limestone, 05.IX.2010, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the Latin for "bird's neck", with reference to the locality where the unique specimen was collected.

Description: Length 12.2 mm. Width across humeri 2.7 mm.

Dark brown. Scapus proximally, pronotum, except at anterior and posterior margin, trochanters and partly femoris and tibiae testaceous. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes small, interocular distance ca. 2 times larger than eye diameter. Labrum transverse, truncate anteriorly. Palps slender; ultimate palpomeres elongate, oblique at apex. Antennal sockets separated by narrow lamina. Antennae nearly attaining to elytral apices, from antennomere 3 flabellate; antennomere 3 ca. 16 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; flabellum of antennomere 3 ca. 2.4 times, flabellum of antennomere 4 ca. 2.8 times and flabellum of antennomere 5 ca. 3.3 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 62 fig. 4). Pronotum transverse, ca. 1.4 times as wide as long, trapezoidal, slightly bisinuate basally and feebly convex anteriorly, with conspicuous acute posterior and blunt rounded anterior angles; median cell relatively broad, extending to pronotal 0.8; lateral carinae straight, conspicuous; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, narrow, bent backwards. Scutellum subquadrate, slightly narrowing distally, triangularly emarginate at apex (Plate 62 fig. 4). Elytra long, ca. 4.2 times longer than wide at humeri, slightly widening posteriorly, with four equally developed primary costae, except weakened in posterior half primary costa 1; all interstices with double rows of transverse subrectangular cells; bottom of cells hairless; pubescence short and decumbent (Plate 62 fig. 4). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with developed plantar pad. Male aedeagus with bottle-shaped median lobe, its constricted distal portion relatively long; inner sac with bipod structure; phallobasal membrane ca. 0.4 length of median lobe (Plate 62 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus avicollaris* sp. nov. may be differentiated from *C. rufithorax* Bourgeois, 1892, similar in coloration, by the broader pronotum and conspicuously longer antennal flabellae, as well as by the bottle-shaped median lobe of the aedeagus (Plate 62 figs 4-6).

Distribution: Known only from Indonesian New Guinea.

Cladophorus bupuensis sp. nov. (Plate 63 figs 1-3)

Holotype ♂ ICM: Papua New Guinea, Upper Bupu, ca. 15 km N Lae, 1-5 km NE Kwapsanek, 600-1300 m, 30.X.1988, R. Holyński leg.

Paratype ♂ ICM: same label as in holotype.

Derivatio nominis: The name of the new species is derived from the locality where the type series was collected.

Description: Length 11.7-12.6 mm. Width across humeri 2.9-3.1 mm.

Dark brown. Scapus proximally light brown; elytral proximal fourth testaceous. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes small, interocular distance ca. 1.5 times greater than eye diameter. Labrum transverse, rounded anteriorly. Palps slender; ultimate palpomeres elongate, oblique at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 3.5 times, flabellum of antennomere 4 ca. 4.7 times and flabellum of antennomere 5 ca. 4.1 times longer than relevant antennal stem; antennomeres 3-11 with relatively short erect pubescence (Plate 63 fig. 1). Pronotum transverse, ca. 1.7 times as wide as long, trapezoidal, slightly bisinuate basally and inconspicuously semi-circularly projected anteriorly, with conspicuous acute laterally projected posterior and rounded anterior angles; median cell moderately broad, reaching anterior margin; lateral carinae straight, conspicuous; anterior cells relatively narrow, slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, broad, bent backwards. Scutellum subquadrate, slightly narrowing distally, triangularly emarginate at apex (Plate 63 fig. 1). Elytra long, ca. 3.6 times longer than wide at humeri, slightly widening posteriorly, with four equally developed primary costae; all interstices with double rows of transverse subrectangular cells; bottom of cells hairy; pubescence dense, short and decumbent (Plate 63 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with developed plantar pad. Male aedeagus with noticeably convex median lobe, its distal constriction relatively short; inner sac with bipod structure; phallobasal membrane ca. 0.5 length of median lobe (Plate 63 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus bupuensis* sp. nov. seems to be close to *C. flabellifer* Bourgeois, 1892, separable by the shorter proximal testaceous elytral band (extending to elytral half in *C. flabellifer*) and shorter constricted distal tip of the median lobe of the aedeagus (Plate 63 figs 1-3).

Distribution: Known only from Upper Bupu, Papua New Guinea.

Cladophorus flavoscutellatus **sp. nov.** (Plate 63 figs 4-5)

Holotype ♀ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 1.VII.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for "with yellow scutellum", alluding to its coloration.

Description: Length 10.8 mm. Width across humeri 2.4 mm.

Dark brown. Pronotal margins, scutellum, elytra below shoulders and around scutellum in elongate triangle, trochanters and bases of femoris light brown. Head without rostrum. Vertex with prominent transverse impression behind antennal prominence. Eyes small, interocular distance ca. 1.7 times greater than eye diameter. Labrum transverse, rounded at sides, truncate anteriorly. Palps slender; ultimate palpomeres elongate, parallel-sided, oblique at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral six sevenths, antennomere 3 dentate; from antennomere 4 flabellate; antennomere 3 ca. 12 times longer than antennomere 2 and 1.1 times longer than antennomere 4; flabellum of antennomere 4 ca. 2 times and flabellum of antennomere 5 ca. 1.5 times shorter than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 63 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, slightly bisinuate basally and moderately convex anteriorly, with concave sides, small conspicuous acute posterior and pronounced blunt anterior angles; median cell broad, reaching anterior margin; lateral carinae developed, but not sharp, concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood prominent, bent backwards. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 63 fig. 4). Elytra long, ca. 3.6 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of small transverse in anterior third and subquadrate posteriorly cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 63 fig. 4). Tibiae and femoris straight, tibiae narrow, femoris relatively broad; tarsomeres 2-4 widened, with plantar pad. Female external genitalia with free, elongate, relatively narrow coxites subequal in length to valvifers; valvifers free, conspicuously convex; styli elongate, robust (Plate 63 fig. 5).

Sexual dimorphism: Male is unknown.
Differential diagnosis: *Cladophorus flavoscutellatus* sp. nov. is readily distinguishable from all congeners by the coloration (Plate 63 fig. 4).
Distribution: Known only from Madang, Papua New Guinea.

Cladophorus grekeae **sp. nov.** (Plate 64 figs 1-3)
Holotype ♂ NME: E Indonesia, Raja Ampat Prov., SW Misool, Misool Utara distr., ca. 2-5 km NNW Aduwey (Adua) vill., Hakau River valley, 01°58'56"S, 129°54'37"E, primeval rainforest near valley, beaten from branches, 25.III.2009, leg. D.Telnov & K.Greke.

Derivatio nominis: Patronymic. The new species is named after one of the collectors of the unique type specimen, Ms. Kristina Greke (Rīga, Latvia).
Description: Length 14.5 mm. Width across humeri 2.9 mm.
Dark brown. Scapus proximally and pedicel light brown; elytral proximal third testaceous. Head without rostrum. Vertex with transverse groove and two deep round impressions behind antennal prominence. Eyes small, interocular distance ca. 2 times greater than eye diameter. Labrum transverse, feebly emarginate anteriorly. Palps slender; ultimate palpomeres stout, elongate, oblique at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and 1.25 times shorter than antennomere 4; flabellum of antennomere 3 ca. 3.3 times, flabellum of antennomere 4 ca. 3.6 times and flabellum of antennomere 5 ca. 3.7 times longer than relevant antennal stem; antennomeres 3-11 with short erect pubescence (Plate 64 fig. 1). Pronotum transverse, ca. 1.4 times as wide as long, trapezoidal, slightly bisinuate basally and feebly arcuate anteriorly, with convex sides, inconspicuous acute posterior and rounded anterior angles; median cell broad in the middle, extending to pronotal 0.7; lateral carinae straight, conspicuous; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, bent backwards. Scutellum elongate, narrowing distally, triangularly emarginate at apex (Plate 64 fig. 1). Elytra long, ca. 3.9 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of transverse subrectangular cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 64 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with straight cylindrical median lobe, its distal constriction short; inner sac with bipod structure; phallobasal membrane ca. 0.5 length of median lobe (Plate 64 figs 2-3).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Cladophorus grekeae* sp. nov. seems to be quite close to *C. bupuensis* sp. nov. (see description of this species above), but is separable by the smaller eyes, somewhat longer proximal testaceous elytral part, as well as by the straight median lobe of the aedeagus with shorter distal constriction (Plate 64 figs 1-3).
Distribution: Known only from Misool.

Cladophorus holynskii **sp. nov.** (Plate 64 figs 4-6)
Holotype ♂ ICM: Papua New Guinea, Upper Bupu, ca. 15 km N Lae, 1-5 km NE Kwapsanek, 600-1300 m, 30.X.1988, R. Holyński leg.

Derivatio nominis: Patronymic. The new species is named after the collector of the unique type specimen, Dr. Roman Holyński (Milanowek, Poland).
Description: Length 12.3 mm. Width across humeri 2.8 mm.
Dark brown. Scapus proximally and pedicel light brown; pronotum, scutellum, elytra, except at distal fifth, trochanters and bases of femoris testaceous. Head without rostrum. Vertex with transverse groove and two small deep round impressions behind antennal prominence. Eyes small, interocular distance ca. 1.6 times greater than eye diameter. Labrum transverse, semi-rectangular, truncate anteriorly. Palps slender; ultimate palpomeres elongate, widened and oblique interiorly. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and 1.1 times longer than antennomere 4; flabellum of antennomere 3 ca. 5.7 times, flabellum of antennomere 4 ca. 6.8 times and flabellum of antennomere 5 ca. 6.5 times longer than relevant antennal stem; antennomeres 3-11 with short erect pubescence (Plate 64 fig. 4). Pronotum transverse, ca. 1.5 times as wide as long, trapezoidal, slightly bisinuate basally and noticeably semicircularly projected anteriorly, with slightly convex sides, conspicuous acute posterior and conspicuous acute anterior angles; median cell moderately broad, extending to pronotal 0.75; lateral carinae conspicuous, slightly concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, narrow, bent backwards. Scutellum subquadrate, narrowing distally, triangularly emarginate at apex (Plate 64 fig. 4). Elytra long, ca. 3.5 times longer

than wide at humeri, slightly widening posteriorly, with four equally developed primary costae; interstices 1 and 5 with double rows of irregular subquadrate cells; all interstices with double rows of transverse subrectagular cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 64 fig. 4). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with somewhat widened distally and noticeably convex median lobe, its distal constriction relatively short; inner sac with bipod structure; phallobasal membrane long, over 0.5 length of median lobe (Plate 64 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus holynskii* sp. nov., resembling *C. ceramensis* Kleine, 1926 from Central Moluccas, Seram Island (which is apparently not a *Cladophorus*, but a *Metriorrhynchus* Gemminger, Harold, 1869 species) in coloration, is easily separable by the very long antennal flabellae and a completely different type of the aedeagus (Plate 64 figs 4-6). It may also be distinguished from other *Cladophorus* species by the strongly trapezoidal pronotum with acute anterior angles.

Distribution: Known only from Upper Bupu, Papua New Guinea.

***Cladophorus humeralissimus* sp. nov.** (Plate 65 figs 1-5)

Holotype ♂ ICM: Papua New Guinea, 17 km SSW Madang, 4 km W Maranga Hook, 7.III.1989, M. & R. Holyński leg.

Paratypes: 8♂ & 6♀ ICM & ISNB: Papua New Guinea, Madang prov., Baiteta, light, O. Missa leg., dates: 9.IV.1996; 10.IV.1993; 9.IV.1996; 13.IV.1996 (2 specimens); 1.V.1996; 15.V.1996 (2 specimens); 16.V.1996; 20.V.1996; 23.V.1996; 20.VI.1996; 25.VI.1996; 15.VII.1996; 1♂ & 1♀ ISNB: Papua New Guinea, Madang prov., Baiteta, fogging, O. Missa leg., dates: 10.V.1995 (♀); 4.VII.1995 (♂).

Derivatio nominis: The name of the new species is derived from the Latin for “shoulder”, alluding to its elytral coloration.

Description: Length 6.3-9.6 mm. Width across humeri 1.5-2.5 mm.

Dark brown. Pronotal margins narrowly light brown; trochanters, elytral humeri and tibiae distally testaceous. Head without rostrum. Vertex with deep triangular impression behind antennal prominence. Eyes relatively large, interocular distance ca. 1.2 times greater than eye diameter. Labrum transverse, slightly emarginate anteriorly. Palps slender; ultimate palpomeres narrow, elongate, pointed and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral five sixths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and 1.4 times longer than antennomere 4; flabellum of antennomere 3 ca. 2 times, flabellum of antennomere 4 ca. 5 times and flabellum of antennomere 5 ca. 5.3 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 65 fig. 1). Pronotum transverse, ca. 1.7 times as wide as long, semi-circular anteriorly, with parallel sides, conspicuous small acute posterior and rounded anterior angles; median cell broad, extending to pronotal 0.75; lateral carinae conspicuous, straight; anterior cells short, slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood very small and narrow, bent backwards. Scutellum subquadrate, slightly narrowing distally, triangularly emarginate at apex (Plate 65 fig. 1). Elytra long, ca. 3.4 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, except primary costa 1 weakening in distal fourth; interstices 1 and 5 with double rows of irregular subquadrate cells; all interstices with double rows of transverse subrectangular cells; bottom of cells hairless; pubescence scarce, short and semi-erect (Plate 65 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with plantar pad (tarsomeres 1 and 2 with minute apical plantar pad). Male aedeagus with relatively broad, noticeably convex, constricted both proximally and distally median lobe; inner sac with scissors-like structure; phallobasal membrane large, leathery, constituting over 0.6 length of median lobe (Plate 65 figs 2-3).

Sexual dimorphism: Female similar to male, but eyes smaller, antennal flabellae shorter, femoris broader (Plate 65 fig. 4). External genitalia with free, elongate, robust coxites; valvifers free, narrow, sinuous, 2.25 times longer than coxites; styli elongate, robust (Plate 65 fig. 5).

Differential diagnosis: *Cladophorus humeralissimus* sp. nov., somewhat resembling *C. brunnescens* Kleine, 1926 in coloration, is easily separable by the less conspicuous testaceous pronotal margin and completely different structure of the aedeagus (Plate 65 figs 1-3); the new species is also distinguishable from most of the congeners by the pointed ultimate palpomeres and very small hood of the mesothoracic spiracle, its long sinuous valvifers (Plate 65 fig. 5) unlike those of any other member of the genus where these structures have been studied.

Distribution: Known only from Madang, Papua New Guinea.

Cladophorus lacrimosus **sp. nov.** (Plate 65 figs 6-9)
Holotype ♂ NME: E Indonesia, West New Guinea, Doberai Peninsula, 15.5-14 km N Ayamaru, 01°08'04"S, 132°11'30"E, 275-250 m, primary lowland rainforest on limestone, 2.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the Latin for "mournful", alluding to its coloration.
Description: Length 12.2 mm. Width across humeri 2.6 mm.
Dark brown to black. Antennomere 2 and pronotum, except at disk, reddish brown. Head without rostrum. Vertex with prominent transverse impression behind antennal prominence. Eyes small, interocular distance ca. 2 times greater than eye diameter. Labrum small, transverse, concave anteriorly. Palps short; ultimate palpomeres robust, widened and flattened at apex. Antennal sockets separated by minute lamina. Antennae nearly attaining to elytral apices, from antennomere 3 flabellate; antennomere 3 ca. 10 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 1.4 times, flabellae of antennomeres 4 and 5 ca. 1.75 times longer than relevant antennal stem; antennomeres 3-11 with short erect pubescence (Plate 65 fig. 6). Pronotum moderately transverse, ca. 1.3 times as wide as long, convex anteriorly, with nearly parallel sides, conspicuous acute posterior and evident blunt anterior angles; median cell relatively narrow, almost attaining anterior margin; lateral carinae inconspicuous, curved; anterior cells somewhat rounded anteriorly, formed by curved antero-lateral carinae, inconspicuous near anterior margin. Mesothoracic spiracle small, hooded; hood long and narrow, bent backwards. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 65 fig. 6). Elytra long, ca. 3.75 times longer than wide at humeri, slightly widening posteriorly, with four equally developed primary costae, except primary costa 1 weakening in distal third; interstices with double rows of small regular subquadrate cells; bottom of cells hairless; pubescence scarce, short and semi-erect (Plate 65 fig. 6). Tibiae and femoris straight and narrow; tarsomeres 2-4 widened, tarsomeres 1-4 with developed plantar pad. Male penultimate tergite bipartite, deeply incised, divided by median suture; ultimate sternite proximally broad, dilated and convex at base (Plate 65 fig. 7). Aedeagus with relatively narrow, straight, convex in lateral view, constricted both proximally and distally median lobe; inner sac with convex in lateral view sclerotized elongate structure, its bipod base short; phallobasal membrane small, leathery, constituting ca. 0.25 length of median lobe (Plate 65 figs 8-9).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Cladophorus lacrimosus* sp. nov. may be placed near *C. avicollaris* sp. nov., separable by the noticeably shorter male antennal flabellae, shorter apical constriction of the median lobe of the aedeagus, shorter bipod base of the inner sac sclerotized structure and conspicuously shorter phallobasal membrane (Plate 65 figs 6-9). It may be distinguished from the also similarly coloured *C. rufithorax* by the different type of the aedeagal structure.
Distribution: Known only from Doberai Peninsula, Indonesian New Guinea.

Cladophorus maurokitrinus **sp. nov.** (Plate 66 figs 1-3)
Holotype ♂ ICM: E Papua New Guinea, Morose Pr., Wau: Ecol. Inst., at light, 1-2.XII.1988, R. Holyński leg.

Derivatio nominis: The name of the new species is derived from the Greek for "black" and "yellow", alluding to its coloration.
Description: Length 11.8 mm. Width across humeri 2.3 mm.
Dark brown to black. Metaventrite, elytral suture at penultimate fourth, abdominal ventrites 1-4, metacoxae, metatrochanters and bases of hind femoris bright orange testaceous. Head without rostrum. Vertex with two small deep oblique impressions behind antennal prominence. Eyes relatively large, interocular distance ca. 1.4 times greater than eye diameter. Labrum transverse, rounded. Palps slender; ultimate palpomeres small, narrow, pointed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral four fifths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and 1.5 times longer than antennomere 4; flabellum of antennomere 3 ca. 2.2 times, flabellum of antennomere 4 ca. 5.5 times and flabellum of antennomere 5 ca. 5.9 times longer than relevant antennal stem; antennomeres 3-11 with very short decumbent pubescence (Plate 66 fig. 1). Pronotum transverse, ca. 1.4 times as wide as long, triangular, bisinuate basally and rounded anteriorly, with conspicuous acute posterior angles; median cell relatively broad anteriorly, extending to pronotal 0.8; lateral carinae conspicuous, long, convex; anterior cells subquadrate, formed by convex antero-lateral carinae. Mesothoracic spiracle small, not hooded. Scutellum subquadrate, slightly narrowing distally, semi-cir-

cularly emarginate at apex (Plate 66 fig. 1). Elytra long, narrow, ca. 5.2 times longer than wide at humeri, widening posteriorly and dehiscent in posterior two thirds, with four equally developed primary costae; all interstices with double rows of small regular transverse cells; bottom of cells hairless; pubescence scarce, short and semi-erect (Plate 66 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with moderately broad, straight, constricted both proximally and distally median lobe; inner sac with scissors-like structure; phallobasal membrane over 0.5 length of median lobe (Plate 66 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus maurokitrinus* sp. nov. is readily differentiated from all congeners by the uniformly black upperside with bright yellow underside, relatively small pronotum, dehiscent elytra, unhooded mesothoracic spiracle and details of the aedeagus (Plate 66 figs 1-3).

Distribution: Known only from Wau, Papua New Guinea.

***Cladophorus maurus* sp. nov.** (Plate 66 figs 4-6)

Holotype ♂ NME: E Indonesia, Irian Jaya, 170 km S Nabire, Epomani, 1150 m, 6.I.1998, A. Weigel leg.

Derivatio nominis: The name of the new species is derived from the Greek for “black”, alluding to its coloration.

Description: Length 12.5 mm. Width across humeri 3 mm.

Uniformly dark brown to black. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes small, interocular distance ca. 2.1 times greater than eye diameter. Labrum transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, elongate, parallel-sided and oblique at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral four fifths, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and 1.1 times shorter than antennomere 4; flabellum of antennomere 3 ca. 2.25 times, flabellum of antennomere 4 and 5 ca. 2.5 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 66 fig. 4). Pronotum transverse, ca. 1.4 times as wide as long, slightly trapezoidal, almost straight basally and semi-circular anteriorly, with conspicuous right posterior and rounded anterior angles; median cell relatively narrow, reaching anterior margin; lateral carinae inconspicuous, near median cell obliterate; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood prominent, bent backwards. Scutellum subquadrate, slightly narrowing distally, triangularly emarginate at apex (Plate 66 fig. 4). Elytra long, ca. 3.5 times longer than wide at humeri, widening posteriorly, with four equally developed primary costae; all interstices with double rows of transverse subrectangular cells; bottom of cells hairless; pubescence scarce, very short and decumbent (Plate 66 fig. 4). Tibiae and femoris straight, tibiae narrow, femoris relatively broad; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with somewhat convex median lobe, its distal constriction long; inner sac with bipod structure; phallobasal membrane over 0.5 length of median lobe (Plate 66 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus maurus* sp. nov., resembling *C. belzebuth* Bourgeois, 1892 in coloration and pronotal structure, is readily separable by the right posterior pronotal angles, and long antennal flabellae, as well as by the slightly convex median lobe of the aedeagus with long distal constriction (Plate 66 figs 4-6).

Distribution: Known only from Nabire area, Indonesian New Guinea.

***Cladophorus nabirensis* sp. nov.** (Plate 67 figs 1-3)

Holotype ♂ ICM: E Indonesia, Irian Jaya, Nabire area, 750 m, 28.V.1995, V. Tuzov leg.

Paratypes 5♂ ICM & NME: E Indonesia, Irian Jaya, 50 km S Nabire, Ilaga road, Pusppenssat Station, 03°29.5’S, 135°43.8.’E, 300 m, VIII-IX.1991, O. Heyes leg. (2 specimens); E Indonesia, Irian Jaya, 50 km S Nabire, Pusppenssat, 29.XII.1996, A. Weigel leg.; E Indonesia, Irian Jaya, 50 km S Nabire, Pusppenssat, 03°29’53”S, 135°43’83”E, 730 m, 20.II.1998, A. Weigel leg.; E Indonesia, Irian Jaya, Nabire area, road Nabire-Ilaga, km 54, 03°29’51”S, 135°43’913”E, 750 m, IV.1998, M. Balke leg.

Derivatio nominis: The name of the new species is derived from the locality where the type series was collected.

Description: Length 14.5-16.2 mm. Width across humeri 3.5-4.0 mm.

Black. Pronotum and elytra, except on elongate triangular patch around scutellum and at apices, bright testaceous. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes small, interocular distance ca. 2 times greater than eye diameter. Labrum transverse, slightly emarginate anteriorly. Palps slender; ultimate palpomeres elongate, robust, oblique interiorly. Antennal sockets separated by narrow lamina. Antennae attaining to elytral five sixths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 3.1 times, flabellum of antennomere 4 ca. 3.5 times and flabellum of antennomere 5 ca. 3.7 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence, with separate short erect bristles (Plate 67 fig. 1). Pronotum transverse, ca. 1.5 times as wide as long, trapezoidal, bisinuate basally and slightly projected anteriorly in the middle, with acute posterior and rounded anterior angles; median cell narrow, extending to pronotal 0.8; lateral carinae developed, slightly concave; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood prominent, bent backwards. Scutellum subquadrate, slightly narrowing distally, triangularly emarginate at apex (Plate 67 fig. 1). Elytra long, ca. 3.3 times longer than wide at humeri, widening posteriorly, with four equally developed primary costae; all interstices with double rows of transverse rectangular cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 67 fig. 1). Tibiae relatively broad, femoris somewhat curved, widening distally; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with straight bullet-shaped median lobe, its distal constriction short; inner sac with bipod structure; phallobasal membrane ca. 0.45 length of median lobe (Plate 67 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus nabirensis* sp. nov. is readily differentiated from all congeners by the coloration with infuscated around scutellum, along suture and at the apices elytra, as well as by the straight bullet-shaped median lobe of the aedeagus with short distal constriction (Plate 67 figs 1-3).

Distribution: Known only from Nabire area, Indonesian New Guinea.

***Cladophorus nimbus* sp. nov.** (Plate 67 figs 4-6)

Holotype ♂ ICM: Papua New Guinea, Kiriwina Is., VIII.1980, R. Zlotin leg.

Derivatio nominis: The name of the new species is derived from the Latin for “black cloud”, alluding to its coloration.

Description: Length 12.0 mm. Width across humeri 2.9 mm.

Black. Pronotum and elytra, except distally around scutellum, bright yellow. Head without rostrum. Vertex with pair of small round impressions behind antennal prominence. Eyes small, interocular distance ca. 1.6 times greater than eye diameter. Labrum transverse, almost truncate anteriorly; epistoma concave. Palps slender; ultimate palpomeres widening and obliquely truncate distally. Antennal sockets separated by narrow lamina. Antennae attaining to elytral five sixths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 2.7 times, flabellum of antennomere 4 ca. 3.7 times and flabellum of antennomere 5 ca. 4 times longer than relevant antennal stem; antennomeres 3-11 with relatively long erect pubescence (Plate 67 fig. 4). Pronotum transverse, ca. 1.6 times as wide as long, trapezoidal, conspicuously narrowed anteriorly, almost straight basally and projected anteriorly in the middle, with acute posterior and rounded anterior angles; median cell narrow, attaining anterior margin; lateral carinae developed, concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood prominent, narrow, long, bent down. Scutellum elongate, narrowing distally, deeply emarginate at apex (Plate 67 fig. 4). Elytra long, ca. 3.4 times longer than wide at humeri, widening posteriorly, with four equally developed primary costae; all interstices with double rows of transverse rectangular cells; bottom of cells hairy; pubescence dense, short and decumbent (Plate 67 fig. 4). Tibiae and femoris straight, relatively broad; tarsomeres 2-4 widened, plantar pad on tarsomeres 1-4, in tarsomere 1 occupying more than half its length. Male aedeagus with straight bullet-shaped median lobe, its distal constriction long and slightly bent outwards; inner sac with bipod structure; phallobasal membrane ca. 0.4 length of median lobe (Plate 67 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus nimbus* sp. nov. is readily differentiated from C. *nabirensis* sp. nov. of somewhat similar coloration by the broader and more narrowed anteriorly pronotum, as well as by the longer and bent outwards distal constriction of the median lobe of the aedeagus (Plate 67 figs 4-6).

Distribution: Known only from Kiriwina Island.

***Cladophorus telnovi* sp. nov.** (Plate 68 figs 1-3)

Holotype ♂ NME: E Indonesia, West Papua, Fak-Fak peninsula, 12-13 km N Fak-Fak, 02°50’06”S, 132°18’22”E, 880-920 m, primeval mossy mountain rainforest on limestone, 24.IX.2010, leg. D.Telnov

Paratypes 2♂ ICM & DTC: same label as in holotype.

Derivatio nominis: The new species is named after the collector of its type series, Dr. Dmitry Telnov (The Entomological Society of Latvia, Rīga).

Description: Length 11.5-15.8 mm. Width across humeri 2.5-3.5 mm.

Dark brown. Pedicel and elytral humeri broadly testaceous. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes very small, interocular distance ca. 2.3 times greater than eye diameter. Labrum transverse, medially emarginate anteriorly. Palps slender; ultimate palpomeres elongate, flattened and oblique at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral five sixths, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and 1.1 times shorter than antennomere 4; flabellum of antennomere 3 ca. 6.5 times, flabellum of antennomere 4 and 5 ca. 7.3 times longer than relevant antennal stem; antennomeres 3-11 with short erect pubescence (Plate 68 fig. 1). Pronotum transverse, ca. 1.4 times as wide as long, trapezoidal, concave posteriorly and conspicuously semi-circularly projected anteriorly, with inconspicuous acute posterior and broadly rounded anterior angles; median cell moderately broad, reaching anterior margin; lateral carinae conspicuous, almost straight; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, bent backwards. Scutellum elongate, narrowing distally, slightly emarginate at apex (Plate 68 fig. 1). Elytra long, ca. 3.9 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of transverse rectangular cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 68 fig. 1). Tibiae and femoris straight, moderately broad; tarsomeres 2-4 widened, with developed plantar pad. Male aedeagus with relatively narrow, slightly widening distally median lobe, its distal constriction relatively long; inner sac with bipod structure; phallobasal membrane ca. 0.5 length of median lobe (Plate 68 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus telnovi* sp. nov., somewhat resembling *C. scapularis* Kleine, 1926 in coloration, is separable by the broader testaceous patches on elytral humeri and distinctly more narrow median lobe of the aedeagus (Plate 68 figs 1-3). The species is also separable from the congeners by the relatively very small eyes.

Distribution: Known only from Onin Peninsula in Indonesian New Guinea.

Cladophorus weigeli **sp. nov.** (Plate 68 figs 4-6)

Holotype ♂ NME: [E Indonesia], Irian Jaya, Biak, 10 km N Bosnik, 01°05'S, 136°20'E, UWP, 13.II.1998, A. Weigel leg.

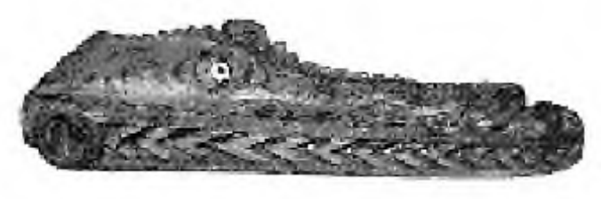
Derivatio nominis: The new species is named after the collector of its type specimen.

Description: Length 6.0 mm. Width across humeri 1.3 mm.

Dark brown to black. Pronotum, except at bottom cells anteriorly and posteriorly, reddish testaceous. Head without rostrum. Vertex with deep transverse impression behind antennal prominence. Eyes small, interocular distance ca. 2 times greater than eye diameter. Labrum small, transverse, convex anteriorly. Palps slender; ultimate palpomeres small, elongate, pointed and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral five sixths, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and 1.2 times shorter than antennomere 4; flabellum of antennomere 3 ca. 2.3 times, flabellum of antennomere 4 ca. 3 times and flabellum of antennomere 5 ca. 3.4 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 68 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, almost straight basally and slightly projected anteriorly, with conspicuous acute posterior and evident blunt anterior angles; median cell moderately broad, extending to pronotal 0.7; lateral carinae conspicuous, straight; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood small, narrow, bent backwards. Scutellum transverse, slightly narrowing distally, noticeably triangularly emarginate at apex (Plate 68 fig. 4). Elytra long, ca. 4.1 times longer than wide at humeri, narrowing posteriorly, with four equally developed primary costae; all interstices with double rows of subrectangular, mostly elongate cells; bottom of cells hairless; pubescence dense, short and semi-erect (Plate 68 fig. 4). Tibiae and femoris straight, relatively broad; tarsomeres 3-4 widened, with developed plantar pad (tarsomeres 1 and 2 with minute apical plantar pad). Male aedeagus with conspicuously convex and gradually narrowed distally median lobe; inner sac with scissors-like structure; phallobasal membrane short (Plate 68 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus weigeli* sp. nov. may be easily differentiated from the somewhat similarly coloured *C. avicollaris* sp. nov. by the conspicuously shorter antennal flabellae, roundish



cells of elytral reticulation, broader legs and conspicuously convex and gradually narrowed distally median lobe of the aedeagus with short phallobasal membrane (Plate 68 figs 4-6).
Distribution: Known only from Biak Island, Cenederawasih Bay, Indonesian New Guinea.

***Cladophorus halmaheraensis* sp. nov.** (Plate 69 figs 1-3)

Holotype ♂ ICM: [E Indonesia], N Moluccas, Halmahera, Talagaranu Mt., 15, SE Baru, 600 m, primeval forest, 22-23.I.1996, Siniaev & Tarasov leg.

Derivatio nominis: The name of the new species is derived from the island where the unique specimen was collected.
Description: Length 8.0 mm. Width across humeri 2.0 mm.
Black. Pronotal carinae and margins, elytra at proximal third, except around scutellum, and proximal fourth of hind femoris testaceous. Head without rostrum. Vertex with fine transverse semi-circular impression behind antennal prominence. Eyes relatively large, interocular distance ca. 1.2 times greater than eye diameter. Labrum transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, narrow, flattened and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and ca. 1.3 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.5 times shorter than stem, flabellum of antennomere 4 ca. 4.3 times and flabellum of antennomere 5 ca. 4.8 times longer than relevant antennal stem; antennomeres 3-11 with short suberect pubescence (Plate 69 fig. 1). Pronotum transverse, ca. 1.4 times as wide as long, trapezoidal, slightly bisinuate basally and semi-circular anteriorly, with inconspicuous acute posterior and rounded anterior angles; median cell moderately broad, extending to pronotal 0.8; lateral carinae conspicuous, slightly concave; anterior cells broad, diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood minute, erect. Scutellum transverse, slightly narrowing distally, semi-circularly emarginate at apex (Plate 69 fig. 1). Elytra long, ca. 3.5 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of regular subquadrate cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 69 fig. 1). Tibiae and femoris straight, relatively broad; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight gradually narrowed distally and concave in the middle median lobe; inner sac with scissors-like structure; phallobasal membrane very short (Plate 69 figs 2-3).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Cladophorus halmaheraensis* sp. nov. may be distinguished from the similarly coloured *C. mancus* Kleine, 1926 by the longer flabellae of antennomeres 4-5 (Plate 69 fig. 1). The new species may also be easily differentiated from all congeners, except *C. obiensis* sp. nov., by the conspicuously narrowed distally and concave in the middle median lobe of the aedeagus, with very short phallobasal membrane (Plate 69 figs 2-3).
Distribution: Known only from Halmahera, North Moluccas.

***Cladophorus obiensis* sp. nov.** (Plate 69 figs 4-6)

Holotype ♂ NME: E Indonesia, North Moluccas, Obi Islands, S Obira Is., Wayaloar vill., ridge W of Wayaloar River, 1°42'42"S, 127°37'01"E, primary lowland forest, 17.XII.2013, leg. L.Wagner.

Derivatio nominis: The name of the new species is derived from the island where the unique specimen was collected.
Description: Length 8.1 mm. Width across humeri 1.8 mm.
Orange testaceous. Head, antennae, distal elytral third, tarsi and distal fourths of tibiae and femoris black. Head without rostrum. Vertex with fine transverse semi-circular impression behind antennal prominence. Eyes relatively large, interocular distance ca. 1.2 times greater than eye diameter. Labrum transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, narrow, flattened and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral three fifths, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and ca. 1.1 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.1 times shorter than stem, flabellum of antennomere 4 ca. 3.3 times and flabellum of antennomere 5 ca. 4.4 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 69 fig. 4). Pronotum transverse, ca. 1.45 times as wide as long, trapezoidal, almost straight basally and semi-circular anteriorly, with laterally projected acute posterior and rounded anterior angles; median cell moderately broad, extending to pronotal 0.7; lateral carinae conspicuous, concave; anterior cells broad, diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small,

hooded; hood minute, erect. Scutellum subquadrate, almost parallel-sided, triangularly emarginate at apex (Plate 69 fig. 4). Elytra long, ca. 3.9 times longer than wide at humeri, parallel-sided, slightly narrowing distally, with four equally developed primary costae; all interstices with double rows of regular subquadrate cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 69 fig. 4). Tibiae and femoris straight, narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight gradually narrowed distally and concave in the middle median lobe; inner sac with scissors-like structure; phallobasal membrane very short (Plate 69 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus obiensis* sp. nov. may be differentiated from the very similar *C. halmaheraensis* sp. nov. by the more narrow body, orange testaceous pronotum and shorter black distal elytral portion, shorter flabellum of antennomere 3 and slightly more narrow femurs and tibiae (Plate 69 fig. 4).

Distribution: Known only from Obi Islands, North Moluccas.

***Cladophorus carbonipennis* sp. nov.** (Plate 69 figs 7-9)

Holotype ♂ ICM: E Indonesia, Irian Jaya, Nabire area, 750 m, 28.V.1995, V. Tuzov leg.

Derivatio nominis: The name of the new species is derived from the Latin for "charcoal", alluding to its coloration.

Description: Length 9.0 mm. Width across humeri 2.0 mm.

Dark brown to black. Trochanters and bases of femoris testaceous. Head without rostrum. Vertex with fine transverse semi-circular impression behind antennal prominence. Eyes relatively large, interocular distance ca. 1.1 times greater than eye diameter. Labrum transverse, triangular and rounded anteriorly. Palps slender; ultimate palpomeres small, elongate, narrowed, flattened and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral three fifths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and ca. 1.3 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.5 times shorter than stem, flabellum of antennomere 4 ca. 2.7 times and flabellum of antennomere 5 ca. 7 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 69 fig. 7). Pronotum transverse, ca. 1.4 times as wide as long, bisinuate basally and semi-circular anteriorly, with concave sides, prominent acute posterior and conspicuous anterior angles; carinae prominent; median cell moderately broad, extending to pronotal 0.7; lateral carinae feebly concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood small, narrow, bent backwards. Scutellum transverse, trapezoidal, truncate at apex (Plate 69 fig. 7). Elytra long, ca. 3.6 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of regular transverse cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 69 fig. 7). Tibiae and femoris straight, relatively narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight gradually widened distally and constricted before apex median lobe; inner sac with scissors-like structure; phallobasal membrane 0.3 length of median lobe (Plate 69 figs 8-9).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus carbonipennis* sp. nov. seems to be related to *C. halmaheraensis* sp. nov. and *Cladophorus obiensis* sp. nov., but may be differentiated by the uniformly dark brown to black upperside, shorter flabellum of antennomere 4 and noticeably different shape of the median lobe of the aedeagus (Plate 69 figs 7-9).

Distribution: Known only from Nabire area, Indonesian New Guinea.

***Cladophorus tertius* sp. nov.** (Plate 70 figs 1-3)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, env. vill. Uper, 01°19'09"S, 133°54'07"E, 1890-2100 m, primary mid-montane rainforest, 8.IX.2015, leg. D.Telnov.

Paratype 1♀ ICM: same label as in holotype.

Derivatio nominis: The name of the new species is derived from the Latin for "third", alluding to its yellow testaceous front third.

Description: Length 12.8-12.9 mm. Width across humeri 2.6-2.7 mm.

Dark brown to black. Pedicel, pronotum and elytral proximal fourth orange testaceous. Head without rostrum. Vertex with shallow triangular impression behind antennal prominence. Eyes large, interocular distance ca. 1.1 times shorter than eye diameter. Labrum transverse, rounded anteriorly; epistoma triangularly projected forward. Palps slender; ultimate palpomeres elongate, slightly narrowing distally, oblique and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae reaching over elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and ca. 1.15 times longer than antennomere 4; flabellum of antennomere 3 subequal in length to relevant antennal stem, flabellae of antennomeres 4 and 5 ca. 1.3 times longer than relevant antennal stems; antennomeres 3-11 with short semi-erect pubescence (Plate 70 fig. 1). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, bisinuate basally and strongly triangularly projected anteriorly, with concave sides, conspicuous acute posterior and pronounced blunt anterior angles; median cell narrow, extending to pronotal 0.6; lateral carinae curved, inconspicuous; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood long, narrow, erect, distally bent backwards. Scutellum transverse, narrowing distally, profoundly triangularly emarginate at apex (Plate 70 fig. 1). Elytra long, ca. 4 times longer than wide at humeri, widening posteriorly, with four equally developed primary costae; all interstices with double rows of mostly transverse subrectangular cells; bottom of cells hairless; pubescence short and decumbent (Plate 70 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with developed plantar pad. Male aedeagus with straight and narrow median lobe, its constricted distal portion short and hooked in lateral view; inner sac with scissors-like structure; phallobasal membrane very short, ca. 0.1 length of median lobe (Plate 70 figs 2-3).

Sexual dimorphism: Similar to male, but eyes much smaller, antennae simply serrate.

Differential diagnosis: *Cladophorus tertius* sp. nov. resembles *C. longicornis* M'Leay, 1886 in coloration, but is easily differentiated by the shorter yellow testaceous part of the elytra; it is also quite different from all congeners in the shape of the median lobe of the aedeagus (Plate 70 figs 1-3).

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

***Cladophorus anggiensis* sp. nov.** (Plate 62 figs 4-6)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, env. vill. Uper, 01°19'09"S, 133°54'07"E, 1890-2100 m, primary mid-montane rainforest, 8.IX.2015, leg. D.Telnov.

Paratype ♂ ICM: same label as in holotype

Derivatio nominis: The name of the new species is derived from the name of the locality (Anggi Gigi Lake), where the type series was collected.

Description: Length 10.4-11.1 mm. Width across humeri 2.2-2.3 mm.

Orange testaceous. Antennae, except, antennomeres 1-2, abdomen, tibiae distally and tarsi dark brown to black. Head without rostrum. Vertex with shallow roundish impression and deeper triangular excavation behind antennal prominence. Eyes relatively large, interocular distance subequal in length to eye diameter. Labrum transverse, rounded anteriorly and feebly emarginate medially; epistoma triangularly projected forward. Palps slender; ultimate maxillary palpomere elongate, oblique and glabrous at apex; ultimate labial palpomere elongate, widening distally, dentate and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae reaching over elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.8 times shorter than relevant antennal stem, flabellae of antennomeres 4 and 5 subequal in length to relevant antennal stems; antennomeres 3-11 with short semi-erect pubescence (Plate 70 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, bisinuate basally and triangularly projected anteriorly, with conspicuous acute posterior and prominent blunt anterior angles; median cell narrow, extending to pronotal 0.75; lateral carinae almost straight, conspicuous; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle hooded; hood narrow, erect. Scutellum transverse, parallel-sided, profoundly semi-circularly emarginate at apex (Plate 70 fig. 4). Elytra long, ca. 4 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of small regular subquadrate cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 70 fig. 4). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, tarsomeres 1-4 with developed plantar pad. Male aedeagus with straight, proximally and distally narrowed median lobe, its constricted distal portion short and rounded in lateral view; inner sac with scissors-like structure; phallobasal membrane ca. 0.25 length of median lobe (Plate 70 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cladophorus anggiensis* sp. nov. is easily separable from the similarly coloured congeners by the relatively short male antennal flabellae, pronotal shape and scissors-like inner sac structure of the median lobe of the aedeagus (Plate 70 figs 4-6).

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

***Cladophorus pusspenssatensis* sp. nov.** (Plate 70 figs 7-9)

Holotype ♂ NME: E Indonesia, Irian Jaya, 50 km S Nabire, Pusspenssat, 13.I.1997, A. Weigel leg.

Paratype 1♀ ICM: E Indonesia, Irian Jaya, 50 km S Nabire, Pusspenssat, 750 m, 31.XII.1997, A. Weigel leg.

Derivatio nominis: The name of the new species is derived from the locality where the type series was collected.

Description: Length 14.8-15.3 mm. Width across humeri 3.2-3.4 mm.

Orange testaceous. Antennae, except antennomere 1 at base and antennomere 2, elytra distally, tibiae distally, tarsi and abdomen dark brown to black. Head without rostrum. Vertex with prominent transverse impression behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum transverse, convex anteriorly; epistoma convex. Palps slender; ultimate palpomeres elongate, narrow, relatively small, obliquely narrowed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 2 times shorter, flabellum of antennomere 4 ca. 1.1 times shorter and flabellum of antennomere 5 ca. 1.1 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 70 fig. 7). Pronotum transverse, ca. 1.2 times as wide as long, feebly bisinuate basally and convex anteriorly, with almost parallel sides, small laterally projected acute posterior and rounded blunt anterior angles; median cell narrow, extending to pronotal 0.65; lateral carinae inconspicuous near sides and medially; anterior cells narrow, diverging anteriorly, formed by obliterate near anterior margin antero-lateral carinae. Mesothoracic spiracle small, hooded; hood small, bent backwards. Scutellum transverse, short, trapezoidal, broadly emarginate at apex (Plate 70 fig. 7). Elytra long, ca. 3.8 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of small regular transverse cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 70 fig. 7). Tibiae and femoris straight, narrow; tarsomeres 2-4 widened, plantar pad on tarsomeres 1-4, in tarsomere 1 occupying more than half its length. Male aedeagus with straight gradually narrowed distally median lobe, flattened and curved at apex; inner sac with scissors-like structure; phallobasal membrane ca. 0.5 length of median lobe (Plate 70 figs 8-9).

Sexual dimorphism: Female similar to male, but somewhat broader, eyes somewhat smaller and antennae serrate.

Differential diagnosis: *Cladophorus pusspenssatensis* sp. nov. is easily separated from most *Cladophorus* species by the short male antennal flabellae; it is distinguishable from the above described *C. anggiensis* sp. nov. and *C. tertius* sp. nov. by, also with short flabellae, by the coloration and the shape of the median lobe of the aedeagus; on the other hand, it may be differentiated from the similarly coloured *C. holynskii* sp. nov. by the uniformly testaceous femoris, more elongate pronotum with much more narrow median cell and scarcer elytral pubescence, as well as by the straight and more narrow median lobe of the aedeagus (Plate 70 figs 7-9).

Distribution: Known only from Indonesian New Guinea.

Pseudodontocerus Pic, 1921

Pseudodontocerus Pic, 1921: 12.

Type species: *Pseudodontocerus pulcher* Pic, 1921, by monotypy.

= *Carathrix* Kleine, 1926: 149.

Type species: *Carathrix pilosus* Kleine, 1926: 149, original designation.

Notes: Only two species of *Pseudodontocerus* Pic, 1921 have so far been described (Pic 1921; Kleine 1926; Bocák 2002). The genus may be distinguished from other metriorrhynchines by the long narrow flabellae stemming from the bases of relevant antennomeres and flabellate female antennae.

Distribution: Confined to New Guinea.

***Pseudodontocerus fuscatus* (Waterhouse, 1879) comb. nov.** (Plate 71 figs 1-3)

Cladophorus fuscatus Waterhouse, 1879: 64.

Material ca. 600 ♂♂ & ♀♀ ICM and ISNB: Papua New Guinea, Madang prov., Baiteta, light, O. Missa leg., dates: 18.III.1993 to 19.V.1993; 16.IV.1994; from 23.IV.1995 to 2.VII.1995; from 9.IV.1996 to 27.VII.1996.

Notes: *Pseudodontocerus fuscatus* seems to be a very common lycid species, at least in some areas in New Guinea, with several hundred specimens collected just at one site in Madang Province (the overwhelming majority being males). Although the antennal flabellae of this species are not as long as those of typical *Pseudodontocerus* (e.g., Plate 11, figs 1, 4) and the aedeagal structure is more remi-

niscent of typical *Cladophorus* (e.g., Plate 1, figs 2-3, 5-6), the way its relatively long flabellae are attached to antennal stems (i.e., at their bases, Plate 10, fig. 1) suggests it is in the intermediate position between the two genera. Therefore, as the easier observable character (the way flabellae are attached to antennal stems) is also supported by the long erect antennal pubescence, which may prove to be another autapomorphy of the genus, the species is tentatively transferred to *Pseudodontocerus*, pending a comprehensive analysis of this lineage of net-winged beetles based on more representative selection of taxa.
Distribution: New Guinea.

Pseudodontocerus gigilacus **sp. nov.** (Plate 71 figs 4-6)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, 2-2.5 km NNE vill. Uper, 01°17'10"S, 133°54'18"E, 1900-2480 m, primary mid-montane rainforest, beaten, 9.IX.2015, leg. D.Telnov.
Paratype 1♂ ICM: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, env vill. Uper, 01°18'05"S, 133°54'24"E, 2200 m, edge of primary mid-montane rainforest, white light, 9-10.IX.2015 and 10-11.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the locality where the type specimen was collected and the Latin for "lake".
Description: Length 8.8-10.8 mm. Width across humeri 2.0-2.1 mm.
Testaceous. Antennae, except antennomere 2, labrum, palps, metaventrite, abdomen, femurs and tibiae, except at base, and tarsi, except terminal tarsomere, dark brown. Head without rostrum. Vertex with prominent shallow roundish behind antennal prominence and conspicuous median carina. Eyes relatively large, interocular distance ca. 1.2 times shorter than eye diameter. Labrum relatively large, transverse, slightly convex anteriorly. Maxillary palps relatively long; ultimate palpomere elongate, almost parallel-sided and oblique distally, glabrous at apex. Labial palps very short; ultimate palpomere broad, pointed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 10 times longer than antennomere 2 and 1.1 times longer than antennomere 4; flabellae gradually transforming from arising from base of stem in antennomere 3 to arising from apex of stem in antennomere 10; flabellum of antennomere 3 ca. 1.9 times and flabellae of antennomeres 4 and 5 ca. 2.2 times longer than relevant antennal stem; antennomeres 3-11 with relatively long erect pubescence (Plate 71 fig. 4). Pronotum transverse, ca. 1.15 times as wide as long, bisinuate basally and triangularly projected anteriorly, with slightly concave sides, small acute posterior and conspicuous blunt anterior angles; median cell relatively broad, reaching pronotal 0.6; lateral carinae curved; anterior cells not diverging anteriorly, straight antero-lateral carinae inconspicuous in anterior third. Mesothoracic spiracle short, hooded; hood narrow, erect. Scutellum transverse, short, conspicuously semi-circularly emarginate at apex (Plate 71 fig. 4). Elytra long, ca. 4.1 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of regular subquadrate cells; bottom of cells mostly hairless; pubescence scarce, short and decumbent (Plate 71 fig. 4). Tibiae and femoris straight, femoris moderately broad, tibiae narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with noticeably widening distally and concave in lateral view median lobe; inner sac with scissors-like structure, rings of "scissors" almost at one level; phallobasal membrane relatively short, ca. 0.4 length of median lobe (Plate 71 figs 5-6).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Pseudodontocerus gigilacus* sp. nov. is readily separated from all congeners by the uniformly testaceous upperside and antennal structure, with flabellae gradually transforming from arising from the base of stem in antennomere 3 to arising from the apex of stem in antennomere 10, as well as by the noticeably widening distally and concave in lateral view median lobe of the aedeagus (Plate 71 figs 4-6).
Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

Pseudodontocerus hilaris **sp. nov.** (Plate 72 figs 1-3)

Holotype ♂ ICM: Papua New Guinea, 10 km N Madang, 2 km NNW Riwo, 9-10.II.1989, M. & R. Holyński leg.

Derivatio nominis: The name of the new species is derived from the Latin for "cheerful", alluding to its coloration.
Description: Length 10.2 mm. Width across humeri 2.2 mm.
Yellow testaceous. Antennae, anterior third pronotum medially and elytra, except band in the middle fifth, dark brown. Head without rostrum. Vertex with transverse impression behind antennal prominence and deep median groove between an-

tennal tubercles. Eyes small, interocular distance ca. 1.4 times greater than eye diameter. Labrum transverse, truncate anteriorly. Maxillary palps relatively long; ultimate palpomere elongate, conspicuously widened and oblique distally, glabrous at inner edge. Labial palps slender; ultimate palpomere elongate, oblique, glabrous and dentate at inner edge. Antennal sockets separated by minute lamina. Antennae nearly attaining to elytral apices, from antennomere 3 flabellate; antennomere 3 ca. 7 times longer than antennomere 2 and 1.4 times shorter than antennomere 4; flabellum of antennomere 3 ca. 5.75 times, flabellum of antennomere 4 ca. 7.5 times and flabellum of antennomere 5 ca. 8 times longer than relevant antennal stem; antennomeres 3-11 with relatively long erect pubescence (Plate 72 fig. 1). Pronotum transverse, ca. 1.2 times as wide as long, bisinuate basally and triangularly projected anteriorly, with straight sides, inconspicuous acute posterior and conspicuous acute anterior angles; median cell relatively broad, reaching anterior margin; lateral carinae smoothed, concave; anterior cells diverging anteriorly, antero-lateral carinae obliterate in anterior half. Mesothoracic spiracle short, hooded; hood minute, directed downwards. Scutellum transverse, narrowing distally, semi-circularly emarginate at apex (Plate 72 fig. 1). Elytra long, ca. 3.75 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of regular subquadrate cells; bottom of cells hairless; pubescence scarce, relatively long and semi-erect (Plate 72 fig. 1). Tibiae and femoris straight, femoris moderately broad, tibiae narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight, triangularly narrowed distally and slightly outwardly bent at apex median lobe; inner sac with scissors-like structure, rings of “scissors” at different level; phallobasal membrane robust, leathery, ca. 0.5 length of median lobe (Plate 72 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Pseudodontocerus hilaris* sp. nov. is readily separated from *P. pulcher* Pic, 1921 and other congeners by the coloration with broad yellow band on the dark brown elytra, as well as by the relatively broad, straight and triangularly narrowed distally median lobe of the aedeagus (Plate 72 figs 1-3).

Distribution: Known only from Madang, Papua New Guinea.

***Pseudodontocerus incultus* sp. nov.** (Plate 72 figs 4-6)

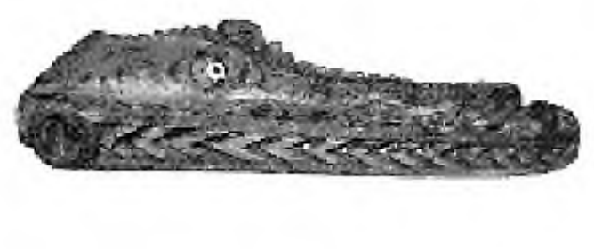
Holotype ♂ ICM: E Papua New Guinea, Morose Pr., Wau: Ecol. Inst., 1200 m, at light, 1-2.XII.1988, R. Holyński leg.

Paratype ♀ ICM: same label as in holotype.

Derivatio nominis: The name of the new species is derived from the Latin for “untidy”, alluding to its long antennal flabellae.

Description: Length 11.2-12.8 mm. Width across humeri 2.2-2.8 mm.

Black. Metaventrite, abdominal ventrites 1-3, metacoxae, metatrochanters and proximal half of hind femoris bright orange testaceous. Head without rostrum. Vertex with transverse impression behind antennal prominence, without groove between antennal tubercles. Eyes small, interocular distance ca. 1.7 times greater than eye diameter. Labrum transverse, convex, emarginate anteriorly. Maxillary palps relatively long; ultimate palpomere elongate, conspicuously widened and oblique distally, glabrous at inner edge. Labial palps slender; ultimate palpomere elongate, oblique, glabrous and dentate at inner edge. Antennal sockets separated by narrow lamina. Antennae attaining to elytral seven eighths, from antennomere 3 flabellate; antennomere 3 ca. 7 times longer than antennomere 2 and subequal in length to antennomere 4; flabellae of antennomeres 3-5 ca. 7 times longer than relevant antennal stems; antennomeres 3-11 with long erect pubescence (Plate 72 fig. 4). Pronotum transverse, ca. 1.4 times as wide as long, almost straight basally and semi-triangularly projected anteriorly, with almost parallel sides, projected laterally acute posterior and rounded anterior angles; median cell narrow, reaching anterior margin; lateral carinae obsolete near median cell, concave; antero-lateral carinae obsolete. Mesothoracic spiracle large, short, not hooded. Scutellum transverse, narrowing distally, slightly semi-circularly emarginate at apex (Plate 72 fig. 4). Elytra long, ca. 4.1 times longer than wide at humeri, parallel-sided, dehiscent distad of proximal two fifths, with four equally developed primary costae; all interstices with double rows of regular subquadrate cells; bottom of cells hairless; pubescence moderately dense, relatively long and erect (Plate 72 fig. 4). Tibiae and femoris straight, narrow; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with narrow (in lateral view), noticeably curved and constricted distally median lobe; inner sac with scissors-like structure, rings of “scissors” at one level; phallobasal membrane ca. 0.4 length of median



lobe (Plate 72 figs 5-6).

Sexual dimorphism: Female similar to male, but somewhat broader, with shorter antennal flabellae, e.g., flabellum of antennomere 3 only ca. 2.7 times longer than antennal stem.

Differential diagnosis: *Pseudodontocerus incultus* sp. nov. may be distinguished from *P. pilosus* (Kleine, 1926) by the uniformly black elytra, as well as by the narrow, curiously curved and constricted distally median lobe of the aedeagus (Plate 72 figs 4-6).

Distribution: Known only from Wau, Papua New Guinea.

***Pseudodontocerus maculihumeralis* sp. nov.** (Plate 73 figs 1-3)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 18.II.1996, O. Missa leg.

Paratypes 2♂ & 1♀ ICM & ISNB: same label as in holotype, but: 16.V.1996; 20.V.1996; 5.VI.1996.

Derivatio nominis: The name of the new species is derived from the Latin for “with a spot on the shoulder”, alluding to its coloration.

Description: Length 6.4-7.1 mm. Width across humeri 1.6-1.7 mm.

Dark brown. Pronotal margin narrowly, elytral humeri, trochanters and bases of femoris testaceous. Head without rostrum. Vertex with two deep round impressions behind antennal prominence, without median groove between antennal tubercles. Eyes relatively large, interocular distance ca. 1.1 times greater than eye diameter. Labrum transverse, slightly emarginate anteriorly. Maxillary palps slender; ultimate palpomere elongate, narrow, slightly narrowed and oblique distally. Labial palps small; ultimate palpomere globular, glabrous and pointed distally. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 1.4 times, flabellum of antennomere 4 ca. 1.7 times and flabellum of antennomere 5 ca. 1.8 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 73 fig. 1). Pronotum transverse, ca. 1.3 times as wide as long, bisinuate basally and semi-triangularly projected anteriorly, with strongly concave sides, conspicuous acute posterior and evident blunt anterior angles; median cell relatively broad, extending to pronotal 0.8; lateral carinae conspicuous, concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood long, narrow, bent backwards. Scutellum small, elongate, parallel-sided, triangularly emarginate at apex (Plate 73 fig. 1). Elytra moderately long, ca. 3 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of mostly elongate cells; bottom of cells hairless; pubescence scarce, short and decumbent (Plate 73 fig. 1). Tibiae and femoris straight, moderately broad; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight, relatively broad and slightly outwardly bent at apex median lobe; inner sac with scissors-like structure, rings of “scissors” at one level; phallobasal membrane ca. 0.35 length of median lobe (Plate 73 figs 2-3).

Sexual dimorphism: Female similar to male, but eyes smaller and antennae simply dentate.

Differential diagnosis: *Pseudodontocerus maculihumeralis* sp. nov. is readily separated from congeners by the shorter antennal flabellae, rufous humeri and straight, relatively broad median lobe of the aedeagus (Plate 73 figs 2-3).

Notes: The dentate female antennae in *P. maculihumeralis* sp. nov. are quite different from other species of the genus where females are known. After a re-analysis of this group of net-winged beetles this species may prove to be not congeneric with the other members of *Pseudodontocerus*.

Distribution: Known only from Madang, Papua New Guinea.

***Pseudodontocerus variicornis* sp. nov.** (Plate 73 figs 4-6)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 15.V.1996, O. Missa leg.

Paratypes 75 ♂♂: same label, dates: 21.IV.1993; 23.IV.1993; 16.IV.1994; 7.VI.1995; 15.VII.1995; 18.III.1996; IV.1996; 8.IV.1996; 9.IV.1996; 11.IV.1996; 13.IV.1996; 22.IV.1996; 1.V.1996; 4.V.1996; 14.V.1996; 15.V.1996; 16.V.1996; 23.V.1996; 29.V.1996; 30.V.1996; 3.VI.1996; 4.VI.1996; 5.VI.1996; 12.VI.1996; 15.VI.1996; 18.VI.1996; 24.VI.1996; 25.VI.1996; 10.VII.1996; 15.VII.1996; 17.VII.1996; 18.VII.1996; 23.VII.1996; 27.VII.1996 (ICM and ISNB); 1♂ NME: Indonesia, Irian Jaya, Nabire, 50 km S Flaga, road Pusppenssat, 3°29’53”S, 135°43’83”E, 18.II.1998, Weigel leg.; 1♂ DTC: E Indonesia, West Papua, Fak-Fak peninsula, 5-7 km N Fak-Fak, 02°53’26”S, 132°18’22”E, 300-400 m, primeval lowland rainforest on limestone, 25.IX.2010, leg. M.Kalniņš.

Derivatio nominis: The name of the new species is derived from the Latin for “with various antennae”, alluding to the variability of its antennal flabellae.

Description: Length 4.8-7.2 mm. Width across humeri 1.0-1.6 mm.

Dark brown to black. Antennomere 2 and posterior half of pronotum light brown; trochanters and proximal half of femoris testaceous. Head without rostrum. Vertex with two small deep round impressions behind antennal prominence. Eyes large, interocular distance subequal in length to eye diameter. Labrum transverse, convex anteriorly. Maxillary palps slender; ultimate palpomere elongate, narrow, slightly narrowed and oblique distally. Labial palps small; ultimate palpomere globular, glabrous and pointed distally. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 1.5 times, flabellum of antennomere 4 ca. 2.2 times and flabellum of antennomere 5 ca. 2.3 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 73 fig. 4). Pronotum transverse, ca. 1.2 times as wide as long, slightly bisinuate basally and semi-triangularly projected anteriorly, with parallel sides, inconspicuous acute posterior and blunt anterior angles; median cell narrow, extending to pronotal 0.7; lateral carinae straight; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood relatively long, narrow, bent backwards. Scutellum transverse, slightly narrowing distally, deeply semi-circularly emarginate at apex (Plate 73 fig. 4). Elytra long, ca. 3.4 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of irregular subquadrate cells; bottom of cells hairless; pubescence scarce, short and decumbent (Plate 73 fig. 4). Tibiae and femoris straight, moderately broad; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight, moderately broad and triangularly narrowed distally median lobe; inner sac with scissors-like structure, rings of "scissors" at one level; phallobasal membrane ca. 0.4 length of median lobe (Plate 73 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Pseudodontocerus varicornis* sp. nov. is readily distinguished from the somewhat similar *P. maculihumeralis* sp. nov. by the uniformly dark brown elytra, conspicuously concave pronotal sides, as well as by the more acute and not outwardly bent at apex median lobe of the aedeagus (Plate 73 figs 4-6).

Variation. In some of the paratypes the flabellum of antennomere 3 is noticeably shorter than in the holotype, only from 1.1 to 1.2 times longer than stem; besides, in some paratypes the body is entirely dark brown to black.

Distribution: Indonesian New Guinea and Madang Province, Papua New Guinea.

***Pseudodontocerus villosus* sp. nov.** (Plate 73 figs 7-10)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 18.VII.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for "hairy", alluding to its elytral pubescence.

Description: Length 6.0 mm. Width across humeri 1.4 mm.

Orange testaceous. Head, antennae, except bases of antennomeres 1 and 2, elytra, except at shoulders and at proximal scutellar triangle, abdomen, femoris distally, tibiae and tarsi dark brown to black. Head without rostrum. Vertex with roundish impression behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum small, transverse, slightly emarginate anteriorly. Palps slender; ultimate palpomeres elongate, narrow, almost parallel-sided, oblique distally. Antennal sockets separated by narrow lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 6 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.2 times shorter than relevant antennal stem, flabellae of antennomeres 4 and 5 ca. 1.3 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 73 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, bisinuate basally and slightly convex anteriorly, with noticeably concave sides, conspicuous acute posterior and blunt rounded anterior angles; median cell broad, extending to pronotal 0.65; lateral carinae inconspicuous, slightly curved; antero-lateral carinae obsolete. Mesothoracic spiracle small, hooded; hood dorsal, erect, minute. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 73 fig. 4). Elytra long, ca. 3.3 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; all interstices with double rows of small roundish cells; bottom of cells hairless; pubescence dense, short and semi-erect (Plate 73 fig. 4). Tibiae and femoris straight, relatively broad; tarsomeres 3-4 widened, tarsomeres

1-4 with developed plantar pad. Male aedeagus with curved, robust, rounded distally median lobe; inner sac with scissors-like structure, rings of "scissors" at one level, inner sac elongate sclerotized structure straight in lateral view; phallobasal membrane ca. 0.3 length of median lobe (Plate 73 figs 9-10).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Pseudodontocerus villosus* sp. nov. is readily distinguished from the congeners by the mostly orange testaceous body, broad and short pronotal median cell, absent antero-lateral pronotal carinae, relatively long and dense elytral pubescence, as well as by the curved robust median lobe of the aedeagus with straight in lateral view inner sac elongate sclerotized structure (Plate 73 figs 7-10).

Distribution: Madang, Papua New Guinea.

Cautires Waterhouse, 1879

Cautires Waterhouse, 1879: 36.

Type species: *Cautires excellens* Waterhouse, 1878, designated by Bourgeois, 1891.

Notes: Several hundred species are listed in the genus *Cautires* Waterhouse, 1879, with many more still undescribed. Several dozen *Cautires* species have been reported from New Guinea and adjacent islands (e.g., Kleine 1926, 1933).

It seems quite probable that *Cautires* actually represents a polyphyletic taxon, with inclusion of species from current (also possibly polyphyletic) *Cladophorus* Guerin-Meneville, 1830, *Xylobanus* Waterhouse, 1879 and related genera. The actual phylogeny of this lineage of net-winged beetles is in apparent need of examination on the basis of a comprehensive phylogenetic analysis.

Distribution: Along with *Xylobanus* Waterhouse, 1879, *Cautires* is one of the two most widespread metriorrhynchine genera. Distributed in East Palaearctic, Oriental, Afrotropical and Papuan regions (Kleine 1933).

***Cautires brunneus* sp. nov.** (Plate 74 fig. 1-3)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 16.V.1996, O. Missa leg.

Paratypes 11♂ ICM & ISNB: same label as in holotype, but 16.IV.1994; 9.IV.1996; 11.IV.1996; 13.V.1996; 20.V.1996; 23.V.1996; 25.VI.1996; 3.VII.1996; 11.VII.1996; 18.VII.1996; 27.VII.1996.

Derivatio nominis: The name of the new species is derived from the Latin for "brown", alluding to its coloration.

Description: Length 7.6-8.6 mm. Width across humeri 1.7-1.9 mm.

Dark brown to black. Breast, narrow spots on elytra near scutellum, coxae, trochanters and proximal half of femoris testaceous. Head without rostrum. Vertex with transverse impression and narrow median keel behind antennal prominence. Eyes relatively large, interocular distance ca. 1.1 times shorter than eye diameter. Labrum small, transverse, rounded anteriorly; epistoma convex. Palps slender; ultimate palpomeres elongate, narrowed distally. Antennal sockets separated by relatively narrow trapezoidal lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 5 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 1.6 times, flabellum of antennomere 4 ca. 2.3 times and flabellum of antennomere 5 ca. 2.8 times longer than relevant antennal stem; antennomeres 3-11 with long scarce erect pubescence (Plate 74 fig. 1). Pronotum slightly transverse, ca. 1.1 times as wide as long, slightly bisinuate basally and convex anteriorly and triangularly projected forward anteriorly, with conspicuously concave sides, acute posterior and rounded anterior angles; median cell narrow, attaining to 0.7 pronotal length; lateral carinae conspicuous, curved; anterior cells diverging anteriorly, formed by slightly concave antero-lateral carinae. Mesothoracic spiracle small, hooded; hood minute, erect. Scutellum transverse, parallel-sided, triangularly emarginate at apex (Plate 74 fig. 1). Elytra long, ca. 3.3 times longer than wide at humeri, parallel-sided, with four equally developed primary costae, not surpassing much secondary costae in stoutness; interstices with double rows of regular, mostly elongate cells; dense, short and decumbent (Plate 74 fig. 1). Tibiae and femoris straight, relatively broad; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight, sharpened distally and widened medially in lateral view median lobe; distal opening occupying ca. 0.4 length of median lobe; inner sac with scissors-like structure, paired median thorns and protruding oval distal part; phallobasal membrane attaining to ca. 0.3 of median lobe (Plate 74 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cautires brunneus* sp. nov. is apparently close to *C. mimicus* Kleine, 1926, known by one specimen from Haveri (Kleine 1926), separable by the light brown streak on elytral base and male genital structure: the median lobe is somewhat less widened medially and not outwardly bent distally in lateral view (Plate 74 figs 1-3).

Distribution: Known only from Madang, Papua New Guinea.

***Cautires dituaoides* sp. nov.** (Plate 74 fig. 4-6)
Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 9.IV.1996, O. Missa leg.
Paratypes 3♂ ICM & ISNB: same label as in holotype, but 9.IV.1996; 13.V.1996; 12.VI.1996.

Derivatio nominis: The name of the new species is derived from the genus name *Ditua* Waterhouse, 1879, alluding to the similarity of its coloration and, to some extent, pronotal structure to those of the mentioned genus.
Description: Length 6.6-8.8 mm. Width across humeri 1.7-2.2 mm.
Orange testaceous. Head, antennae, except scapus basally and pedicel, pronotum, except at margins, elytral distal third, abdomen, except ultimate sternite, black; femoris distally and tibiae brown. Head without rostrum. Vertex with two deep oblique impressions behind antennal prominence. Eyes small, interocular distance ca. 1.7 times greater than eye diameter. Labrum large, transverse, widening and rounded anteriorly, slightly emarginate medially. Palps slender; ultimate palpomeres elongate, pointed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 strongly serrate; antennomere 3 ca. 5 times longer than antennomere 2 and subequal in length to antennomere 4; antennomeres 3-11 with short dense decumbent pubescence (Plate 74 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, almost parallel-sided, slightly bisinuate basally and convex anteriorly, with slightly concave sides, acute posterior and rounded anterior angles; median cell broad, almost attaining anterior margin; lateral carinae conspicuous, almost straight; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae, weakened near anterior margin. Mesothoracic spiracle small, hooded; hood narrow, erect. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 74 fig. 4). Elytra long, ca. 3.4 times longer than wide at humeri, slightly narrowing distally, with four equally developed primary costae; interstices with double rows of small transverse cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 74 fig. 4). Tibiae and femoris straight, relatively broad; tarsomeres 2-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with relatively stout, gradually widened distally and conspicuously curved in lateral view median lobe; inner sac with paired elongate distal structure and outwardly projected spine distally; phallobasal membrane stout, semi-sclerotized, attaining to half of median lobe (Plate 74 figs 5-6).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Cautires dituaoides* sp. nov. can be separated from congeners by the combination of coloration, pointed ultimate palpomeres, serrate male antennae and broad and almost reaching anterior margin median pronotal cell, as well as by the long and semi-sclerotized phallobasal membrane of the aedeagus (Plate 74 figs 4-6). It resembles in coloration *Ditua dichroma* (Boisduval, 1835), from which it differs by the absent spine on the ultimate sternite, as well as by the different type of the aedeagus.
Distribution: Known only from Madang, Papua New Guinea.

***Cautires eniclasoides* sp. nov.** (Plate 74 fig. 7-9)
Holotype ♀ NME: Indonesia, Irian Jaya, 50 km S Nabire, Ilaga road, Pusppensaat Station, 3°29.5'S, 135°43.8'E, 300 m, VIII-IX.1991, P. Hoyes leg.

Derivatio nominis: The name of the new species is derived from the genus name *Eniclases* Waterhouse, 1879, alluding to the similarity of its pronotal structure to that of *Eniclases*.
Description: Length 8.0 mm. Width across humeri 1.7 mm.
Uniformly black. Head without rostrum. Vertex with shallow transverse impression behind antennal prominence. Eyes small, interocular distance ca. 1.6 times greater than eye diameter. Labrum small, transverse. Maxillary palps short and stout; ultimate palpomeres slightly longer than wide, almost parallel-sided, oblique distally. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fifths, flattened, serrate; antennomere 3 ca. 9 times longer than antennomere 2 and subequal in length to antennomere 4; antennomeres 3-11 with short sub-erect pubescence (Plate 74 figs 7). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, slightly bisinuate basally and almost truncate anteriorly, with slightly concave sides, conspicuous acute posterior and evident blunt anterior angles; median cell narrow, diamond-shaped, extending to pronotal 0.7; lateral carinae inconspicuous; anterior cells strongly diverging anteriorly, formed by straight antero-lateral carinae, triangular proximally (Plate 74 figs 8). Mesothoracic spiracle slightly protruding, not hooded. Scutellum transverse, rounded. Elytra long, ca. 3.8 times longer than wide at humeri, parallel-sided, with four

equally developed primary costae; interstices with double rows of irregular roundish cells; bottom of cells hairless; pubescence scarce, short and decumbent (Plate 74 figs 7-8). Tibiae and femoris straight, moderately broad; tarsomeres 3-4 widened, plantar pad developed. Female external genitalia with free, elongate, relatively slender coxites; valvifers semi-attached to coxites, narrow, almost straight, ca. 2 times longer than coxites; styli elongate, robust; vagina sclerotized (Plate 74 fig. 9).

Sexual dimorphism: Male is unknown.

Differential diagnosis: *Cautires eniclasoides* sp. nov. is readily distinguished from all congeners by the pronotal structure (Plate 74 fig. 8), more reminiscent of that of the genus *Eniclases*, from which it is separable by the structure of its elytra.

Distribution: Known only from Indonesian New Guinea.

***Cautires extraneus* sp. nov.** (Plate 75 figs 1-4)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, 2-2.5 km NNE vill. Uper, 01°17'10"S, 133°54'18"E, 1900-2480 m, primary mid-montane rainforest, 9.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the Latin for "extraneous", alluding to its narrow body.

Description: Length 8.6 mm. Width across humeri 1.4 mm.

Orange testaceous. Antennae, except antennomere 2, and legs dark brown to black. Rostrum absent. Vertex with roundish impression behind antennal prominence. Eyes large, interocular distance ca. 1.2 times greater than eye diameter. Labrum small, subquadrate, truncate anteriorly; epistoma emarginate medially. Palps slender; ultimate palpomeres slightly elongate, semi-globular, oblique at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral three fifths, from antennomere 3 flattened, serrate; antennomere 3 ca. 5 times longer than antennomere 2 and ca. 1.1 times shorter than antennomere 4; antennomeres 3-11 with short sub-erect pubescence (Plate 75 fig. 1). Pronotum transverse, ca. 1.25 times as wide as long, trapezoidal, bisinuate basally and triangularly projected anteriorly, with laterally projected acute posterior and apparent blunt anterior angles; median cell narrow, extending to pronotal 0.65; lateral carinae concave; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood elongate, narrow, erect. Scutellum transverse, parallel-sided, triangularly emarginate at apex (Plate 75 fig. 1). Elytra very long, ca. 4.6 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices with double rows of irregular elongate cells; pubescence dense, short and decumbent (Plate 75 fig. 1). Tibiae and femoris narrow, straight; tarsomeres 2-4 widened, tarsomeres 1-4 with plantar pad. Male ultimate sternite with brush of longer bristles ventrally (Plate 75 fig. 2). Aedeagus with abruptly widened distally median lobe, distal opening occupying ca. 0.4 its length; inner sac with circular distal bulge bearing dense minute thorns and paired elongate lateral thorns; phallobasal membrane membranous, relatively large, ca. 0.45 median lobe (Plate 75 figs 3-4).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cautires extraneus* sp. nov. may be easily distinguished from the congeners by the very narrow body, serrate antennae and abruptly widened distally median lobe of the aedeagus, with circular distal bulge bearing dense minute thorns and paired elongate lateral thorns (Plate 75 figs 1-4).

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

***Cautires ignotus* sp. nov.** (Plate 75 figs 5-7)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 16.IV.1996, O. Missa leg.

Paratypes 4♂ ICM & ISNB: same label as in holotype, but 28.V.1996; 24.VI.1996.

Derivatio nominis: The name of the new species is derived from the Latin for "unknown".

Description: Length 5.5-7.3 mm. Width across humeri 1.3-1.6 mm.

Testaceous. Antennae distally, head, elytra, except at humeri and along suture in proximal half, dark brown. Head without rostrum. Vertex with deep triangular impression behind antennal prominence. Eyes small, interocular distance ca. 1.6 times greater than eye diameter. Labrum small, transverse, truncate anteriorly. Maxillary palps slender; ultimate palpomere elongate, slightly narrowed, oblique and glabrous at apex. Labial palps minute; ultimate palpomere small, elongate, pointed and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral three fourths, from antennomere 3 flabellate; antennomere 3 ca. 5 times longer than antennomere 2 and 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.3 times shorter than stem, flabellum of antennomere 4 ca. 2.1 times and flabellum of antennomere 5 ca. 2.3 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 75 fig. 5). Pronotum transverse, ca. 1.2 times as wide as long, parallel-sided, bisinuate basally and slightly convex anteriorly, with inconspicuous acute posterior and evident blunt anterior angles; median cell relatively broad, extending to pronotal 0.85; lateral carinae curved; anterior cells broad, not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood narrow, bent backwards. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 75 fig. 5). Elytra long, ca. 3.8 times longer than wide at humeri, widest at humeri, parallel-sided in distal four fifths, with four equally developed primary costae; interstices with double rows of cells of small, mostly transverse rectangular cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 75 fig. 5). Tibiae and femoris straight, femoris moderately broad, tibiae narrow; tarsomeres 3-4 widened, with plantar pad, tarsomeres 1 and 2 with apical plantar pad. Male aedeagus with gradually, but prominently widened distally median lobe; inner sac with paired distal structure and outwardly protruding thorn; phallobasal membrane semi-sclerotized, attaining to ca. 0.6 of median lobe (Plate 75 figs 6-7).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cautires ignotus* sp. nov. is readily separated from congeners by the coloration, antennal structure, parallel-sided pronotum with feebly convex anterior margin and paired distal structure and outwardly protruding thorn of the inner sac of the aedeagal median lobe, as well as by the semi-sclerotized phallobasal membrane, attaining to ca. 0.6 of median lobe (Plate 75 figs 6-7).

Distribution: Known only from Madang, Papua New Guinea.

Cautires maturnus **Kleine, 1926** (Plate 75 figs 8-10)

Cautires maturnus Kleine, 1926: 150

Material 49♂ & 14♀ ICM & ISNB: Papua New Guinea, Madang prov., Baiteta, light, O. Missa leg, dates: 10.IV.1993; 16.IV.1994; 1995; 16.IV.1995; 13.IV.1996; 15.IV.1996; 22.IV.1996; 16.V.1996; 20.V.1996; 27.V.1996; 28.V.1996; 30.V.1996; 3.VI.1996; 4.VI.1996; 5.VI.1996; 10.VI.1996; 11.VI.1996; 14.VI.1996; 18.VI.1996; 24.VI.1996; 25.VI.1996; 26.VI.1996; 27.VI.1996; 3.VII.1996; 4.VII.1996; 15.VII.1996; 17.VII.1996; 18.VII.1996; 23.VII.1996; 24.VII.1996; 25.VII.1996; 27.VII.1996.

Distribution: New Guinea: Paomomu River, Moroka, Dilo, Fiume Pirari, Ighiberei, Bujakori (Kleine 1926); Madang, Papua New Guinea.

Cautires miklukhomaklaii **sp. nov.** (Plate 75 figs 11-13)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 23.VII.1996, O. Missa leg.

Paratypes 45♂ ICM & ISNB: same label as in holotype, dates: 24.III.1993; 18.V.1993; 8.IX.1993; 16.IV.1994; 2.VII.1995; IV.1996; 8.IV.1996; 9.IV.1996; 11.IV.1996; 13.IV.1996; 17.IV.1996; 22.IV.1996; 30.IV.1996; 15.V.1996; 16.V.1996; 23.V.1996; 29.V.1996; 30.V.1996; 3.VI.1996; 5.VI.1996; 19.VI.1996; 24.VI.1996; 26.VI.1996; 3.VII.1996; 4.VII.1996; 23.VII.1996; 27.VII.1996; paratype ♀: Papua New Guinea, Madang prov., Baiteta, fogging, 19.III.1993, O. Missa leg.

Derivatio nominis: The new species is named after the famous XIX century explorer of New Guinea, N.N. Miklukho-Maklai.

Description: Length 5.2-5.9 mm. Width across humeri 1.2-1.4 mm.

Dark brown. Antennomere 2, proximal half of pronotum, trochanters and very bases of femoris light brown. Head without rostrum. Vertex with deep transverse impression just behind antennal prominence. Eyes large, interocular distance ca. 1.4 times shorter than eye diameter. Labrum small, transverse, truncate anteriorly. Palps slender; ultimate palpomeres small, elongate, almost pointed distally and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral middle, from antennomere 3 flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and 1.4 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.6 times, flabellum of antennomere 4 ca. 2.4 times and flabellum of antennomere 5 ca. 2.8 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 75 fig. 11). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, slightly bisinuate basally and strongly triangularly projected anteriorly, with inconspicuous acute posterior and evident blunt anterior angles; median cell narrow, extending to pronotal 0.7; lateral carinae inconspicuous, concave; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, hooded; hood narrow, erect. Scutellum subquadrate, slightly narrowing distally, semi-circularly emarginate at apex (Plate 75 fig. 11). Elytra long, ca. 3.6 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices

1 and 5 with double rows of irregular subquadrate cells; interstices 2-3 with double rows of cells at proximal thirds; interstice 4 with double row of cells at proximal two thirds; bottom of cells hairless; pubescence dense, short and decumbent (Plate 75 fig. 11). Tibiae and femoris straight, moderately broad; tarsomeres 2-4 widened, with plantar pad (tarsomeres 1 and 2 with minute apical plantar pad). Male aedeagus with relatively broad, gradually widened distally and rounded at apex; inner sac with paired basal structure and a pair of bracket-like structures distally (Plate 75 figs 12-13).

Sexual dimorphism: Female similar to male, but larger, eyes smaller and antennae serrate.

Differential diagnosis: *Cautires miklukhomaklaii* sp. nov. is distinguished from congeners by the broad pronotum with relatively short median areola, weak elytral reticulation, with secondary costae disappearing in the central part of interstices 2-4, and gradually widened distally median lobe of the aedeagus (Plate 75 figs 11-13).

Variation. In some of the paratypes the pronotum is entirely testaceous, while in others it is uniformly dark brown.

Distribution: Known only from Madang, Papua New Guinea.

***Cautires picipennis* sp. nov.** (Plate 76 figs 1-3)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 24.IV.1996, O. Missa leg.

Paratypes 13♂ ICM & ISNB: same label as in holotype, but 16.IV.1994; 9.IV.1996; 16.IV.1996; 22.IV.1996; 23.IV.1996; 29.IV.1996; 15.V.1996; 16.V.1996; 20.V.1996; 30.V.1996; 20.VI.1996.

Derivatio nominis: The name of the new species is derived from the Latin for “with grayish wings”, alluding to its coloration.

Description: Length 4.9-6.0 mm. Width across humeri 1.1-1.4 mm.

Dark brown to grayish black. Metaventrite and trochanters light brown. Pronotal sides narrowly light brown. Head without rostrum. Vertex with deep fine transverse groove behind antennal prominence. Eyes relatively large, interocular distance ca. 1.4 times greater than eye diameter. Labrum small, transverse, convex anteriorly. Palps slender; ultimate palpomeres small, elongate, almost pointed distally and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 8 times longer than antennomere 2 and 1.1 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.3 times, flabellum of antennomere 4 ca. 1.5 times and flabellum of antennomere 5 ca. 2 times longer than relevant antennal stem; antennomeres 3-11 with short sub-erect pubescence (Plate 76 fig. 1). Pronotum transverse, ca. 1.2 times as wide as long, bisinuate basally, somewhat widened and semi-circularly projected anteriorly, with slightly concave sides, inconspicuous acute posterior and evident blunt anterior angles; median cell narrow, extending to pronotal 0.65; lateral carinae short, straight; anterior cells rectangular, formed by very fine antero-lateral carinae. Mesothoracic spiracle small, hooded; hood narrow, bent backwards. Scutellum subquadrate, parallel-sided, triangularly emarginate at apex (Plate 76 fig. 1). Elytra long, ca. 4.2 times longer than wide at humeri, parallel-sided, with four equally developed fine primary costae; all interstices with double rows of rectangular, mostly elongate cells; bottom of cells hairless; pubescence dense, relatively long and erect (Plate 76 fig. 1). Tibiae and femoris straight, moderately broad; tarsomeres 2-4 widened, with plantar pad. Male aedeagus with straight, slightly widened above middle median lobe; inner sac with V-shaped setose pad, without sclerotized structures; phallobasal membrane non-sclerotized, short, less than 0.3 length of median lobe (Plate 76 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Cautires picipennis* sp. nov. is only tentatively placed in *Cautires*, as it is quite unlike most other members of the genus in not having any sclerotized inner sac structures. It may additionally be differentiated from most congeners by the broad and somewhat widened anteriorly pronotum with short narrow median cell (Plate 76 figs 1-3).

Distribution: Known only from Madang, Papua New Guinea.

***Cautires tricoloripennis* sp. nov.** (Plate 76 figs 4-7)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 5.VI.1996, O. Missa leg.

Paratypes 173♂♂ & ♀♀ ICM & ISNB: same label as in holotype, but from 18.III.1993 to 20.V.1993; 1995; from 9.IV.1996 to 27.VII.1996; 1♂: Papua New Guinea, Madang prov., Baiteta, fogging, 16.V.1995, O. Missa leg; 1♀: Papua New Guinea, Madang prov., Baiteta, fogging, 26.V.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for “with tricolor wings”, alluding to the coloration of its elytra.

Description: Length 7.6-10.8 mm. Width across humeri 2.0-2.7 mm.

Orange testaceous. Head, scapus and distal antennomeres, pronotum anteriorly, elytral band at medial third triangularly projected towards scutellum, hind femoris and tibiae partially and abdomen dark brown to black; distal elytral third light brown. Rostrum absent. Vertex with prominent transverse and two deeper roundish impressions behind antennal prominence. Eyes relatively large, interocular distance subequal in length to eye diameter. Labrum transverse, almost truncate anteriorly, rounded at anterior angles; epistoma medially triangularly projected forward. Maxillary palps relatively long ultimate palpomere elongate, slightly widened distally, oblique at apex; labial palps slender, short, ultimate palpomere pointed and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere flabellate; antennomere 3 ca. 9 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.4 times shorter, flabellum of antennomere 4 ca. 1.1 times longer and flabellum of antennomere 5 subequal in length to relevant antennal stem; antennomeres 3-11 with short dense decumbent pubescence (Plate 76 fig. 4). Pronotum transverse, ca. 1.2 times as wide as long, bisinuate basally and semi-circularly projected anteriorly, with concave sides, convex before hind angles, acute posterior and rounded anterior angles; median cell narrow, extending to pronotal 0.7; lateral carinae feebly concave; anterior cells almost not diverging anteriorly, formed by concave antero-lateral carinae. Mesothoracic spiracle small, hooded; hood narrow bent backwards. Scutellum transverse, concave at sides, prominently emarginate at apex (Plate 76 fig. 4). Elytra long, ca. 3.2 times longer than wide at humeri, parallel-sided, with four strong, equally developed primary costae; interstices with double rows of regular subquadrate cells; bottom of cells glabrous; pubescence short and decumbent (Plate 76 fig. 4). Tibiae and femoris broad and straight; tarsomeres 3-4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight, widened distally and constricted at apex median lobe; inner sac with scissors-like structure and paired curved horns; phallobasal membrane massive, attaining to ca. 0.5 of median lobe (Plate 76 figs 5-7).

Sexual dimorphism: Female similar to male, but larger, eyes smaller, antennae serrate.

Differential diagnosis: *Cautires tricoloripennis* sp. nov. may be distinguished from congeners by the coloration and the shape of the median lobe of the aedeagus (Plate 76 figs 4-7).

Distribution: Known only from Madang, Papua New Guinea.

Malacolycus **Kleine, 1943**

Malacolycus Kleine, 1943: 151.

Type species: *Malacolycus paululus* Kleine, 1943: 151, by monotypy.

Notes: Only two species of this genus have so far been described (Kazantsev 2015b).

Distribution: New Guinea.

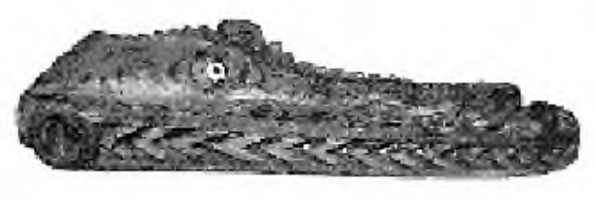
Malacolycus gigiensis **sp. nov.** (Plate 76 figs 8-10)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, 2-2.5 km NNE vill. Uper, 01°17’10”S, 133°54’18”E, 1900-2480 m, primary mid-montane rain forest, beaten, 9.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from lake Anggi Gigi in the vicinity of which the type specimen was collected.

Description: Length 4.5 mm. Width across humeri 0.8 mm.

Dark brown to black. Head ventrally, pronotal margins, elytra, except at distal half and front trochanters brownish testaceous. Head subquadrate, without rostrum. Vertex with fine median keel just behind antennal prominence. Eyes small, interocular distance ca. 1.5 times greater than eye diameter, slightly incised opposite antennal sockets. Labrum small, transverse. Palps slender; ultimate palpomeres small, elongate, almost pointed distally and glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral middle, narrow; antennomeres 3-11 parallel-sided, slightly compressed; antennomere 3 ca. 4 times longer than antennomere 2 and 1.1 times longer than antennomere 4; antennomeres 3-11 with relatively long sub-erect pubescence (Plate 76 fig. 8). Pronotum transverse, ca. 1.5 times as wide as long, trapezoidal, slightly bisinuate basally and triangularly projected anteriorly, with prominent acute posterior and conspicuous blunt anterior angles; median cell weak, oval, extending to pronotal 0.7; lateral and antero-lateral carinae almost obsolete. Scutellum subquadrate, strongly narrowing distally, semi-circularly emarginate at apex (Plate 76 fig. 8). Elytra long, narrow, ca. 4.6 times longer than wide at humeri, parallel-sided, with four weak, equally developed primary costae; interstices with single rows of large irregular elongate cells; bottom of cells hairless; pubescence scarce, relative long and erect (Plate 76 fig. 8). Tibiae and femoris straight and narrow; tarsomeres narrow, with minute apical plantar pad noticeable on tarsomere 4. Male aedeagus with small, short, relatively broad, rounded at apex median lobe; inner sac with W-shaped



structure; phallobase large, nearly as long as 0.7 length of median lobe; phallobasal membrane almost obsolete (Plate 76 figs 9-10).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Malacolycus gigiensis* sp. nov. is easily separable from the congeners (*M. paululus* Kleine, 1943 and *M. lacius* Kazantsev, 2015) by the coloration and completely different shape of the aedeagus, with short and conspicuously widened distally median lobe (Plate 76 figs 8-10).

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

Metriorrhynchus Gemminger, Harold, 1869

Metriorrhynchus Gemminger, Harold, 1869: 1629.

Type species: *Lycus parallelus* Guerin-Meneville, 1838, designated by Waterhouse, 1878.

Notes: The genus *Metriorrhynchus* Gemminger, Harold, 1869 is one of the most common and speciose in New Guinea. As its concept had long been misinterpreted, even the approximate number of its species is hard to estimate (Bocák 2002). Fourteen New Guinean species were added to this genus recently (Kazantsev 2015b).

Distribution: Oriental and Australian regions (Kleine 1933; Bocák 2002).

Metriorrhynchus cochleiformis sp. nov. (Plate 76 figs 11-13)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 25.VII.1996, O. Missa leg.

Paratypes 2♂ & 3♀ ICM & ISNB: same label as in holotype, dates: 26.III.1993; 19.V.1993; 20.V.1993; 7.VI.1993.

Derivatio nominis: The name of the new species is derived from the Latin for “similar to a snail”, alluding to the shape of its aedeagus.

Description: Length 7.4-10.5 mm. Width across humeri 2.0-2.5 mm.

Dark brown to black. Rostrum short. Vertex with transverse impression behind antennal prominence. Eyes moderately large, interocular distance ca. 1.1 times greater than eye diameter. Labrum slightly wider than long, rounded anteriorly; epistoma broadly concave. Palps slender; ultimate palpomeres narrow, elongate, obliquely narrowed distally and glabrous apically. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fifths, from antennomere 3 serrate; antennomere 3 ca. 8 times longer than antennomere 2 and subequal in length to antennomere 4; antennomeres 3-11 with short decumbent pubescence and separate long bristling hairs (Plate 76 fig. 11). Pronotum transverse, ca. 1.3 times as wide as long, trapezoidal, with almost straight sides, slightly bisinuate basally and semi-circularly projected anteriorly, with acute posterior and blunt anterior angles; median cell narrow, attaining to pronotal 0.7; lateral carinae concave; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle large, protruding, with small short vertical posterior hood. Scutellum transverse, slightly narrowing distally, semi-circularly emarginate at apex (Plate 76 fig. 11). Elytra long, ca. 3 times longer than wide at humeri, slightly narrowing distally, with four equally developed primary costae; interstices with double rows of small roundish cells; last interstice well visible from above, except under humerus; bottom of cells glabrous; pubescence short and decumbent (Plate 76 fig. 11). Tibiae and femoris straight; femoris broad, with long erect vestiture on inner side; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad. Male aedeagus with robust, conspicuously widened medially median lobe; inner sac with massive coiled structure deposited inside distal half of median lobe, without thorns; phallobasal membrane robust, semi-sclerotized, ca. 0.5 length of median lobe (Plate 76 figs 12-13).

Sexual dimorphism: Female similar to male, but larger, eyes somewhat smaller, femoris without long erect pubescence.

Differential diagnosis: *Metriorrhynchus cochleiformis* sp. nov. may be distinguished from the congeners by the short median pronotal cell, as well as by the robust, conspicuously widened medially median lobe of the aedeagus, with massive coiled inner sac structure (Plate 76 figs 11-13).

Distribution: Known only from Madang, Papua New Guinea.

Metriorrhynchus uperensis sp. nov. (Plate 77 figs 1-3)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, env. vill. Uper, 01°18’09”S, 133°54’07”E, 1890-2100 m, primary mid-montane rainforest, 8.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the locality where the type specimen was collected.

Description: Length 15.8 mm. Width across humeri 3.1 mm.

Orange testaceous. Antennae, except antennomeres 1-2 and internally antennomeres 3-4, disk of abdominal segments and tarsi dark brown to black. Rostrum short. Vertex with roundish impression and pair of minute oblique strikes behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum elongate, rounded; epistoma broadly concave. Palps slender; ultimate palpomeres elongate, slightly widened distally and oblique apically. Antennal sockets separated by narrow lamina. Antennae attaining to elytral two thirds, from antennomere 3 strongly serrate; antennomere 3 ca. 10 times longer than antennomere 2 and subequal in length to antennomere 4; antennomeres 3-11 with short decumbent pubescence (Plate 77 fig. 1). Pronotum transverse, ca. 1.2 times as wide as long, trapezoidal, with almost straight sides, bisinuate basally and semi-circularly projected anteriorly, with prominent acute posterior and rounded anterior angles; median cell narrow, almost attaining anterior margin; lateral carinae straight, obliterate near lateral margins; anterior cells not diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle large, vertical, hooded; hood short, bent backwards. Scutellum transverse, slightly narrowing distally, rectangularly emarginate at apex (Plate 77 fig. 1). Elytra long, ca. 4.2 times longer than wide at humeri, slightly widening distally, with four equally developed primary costae; interstices with double rows of small regular, mostly transverse cells; pubescence dense, short and decumbent (Plate 77 fig. 1). Tibiae and femoris narrow, straight; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad, tarsomere 1 with plantar pad covering its entire ventral surface. Male aedeagus with narrow, slightly curved medially, slightly widening distally median lobe, with narrow, coiled, tapering apically trunk, provided with minute thorns; inner sac without thorns; phallobasal membrane semi-sclerotized, ca. 0.3 length of median lobe (Plate 77 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Metriorrhynchus uperensis* sp. nov. may be easily distinguished from the congeners by the combination of coloration, antennal and pronotal structure, as well as by the narrow, curved medially, slightly widening distally median lobe, with narrow coiled and provided with minute thorns trunk, with the inner sac bearing no thorns (Plate 77 figs 1-3).

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

***Metriorrhynchus vitiosus* sp. nov.** (Plate 77 figs 4-6)

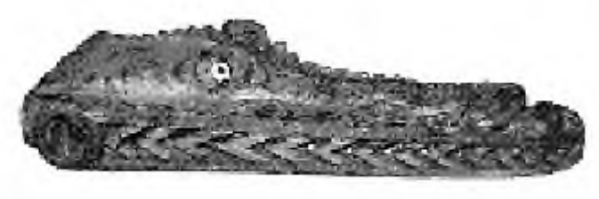
Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 8.VI.1993, O. Missa leg.

Paratypes 2♂ ICM & ISNB: same label as in holotype, dates: 9.IV.1996; 30.IV.1996.

Derivatio nominis: The name of the new species is derived from the Latin for “bad, vicious”, alluding to its appearance and coloration.

Description: Length 6.8-7.2 mm. Width across humeri 1.5-1.6 mm.

Dark brown. Pronotal sides narrowly and posterior pronotal angeles, trochanters, femoris and tibiae basally testaceous. Rostrum short. Vertex with deep semi-circular impression behind antennal prominence. Eyes moderately large, bulging, interocular distance ca. 1.1 times longer than eye diameter. Labrum ca. 1.4 times wider than long, truncate anterior with rounded anterior angles; epistoma deeply concave. Palps slender; ultimate palpomeres elongate, narrow, pointed and glabrous apically. Antennal sockets separated by relatively narrow lamina. Antennae attaining to elytral middle, from antennomere 3 flabellate; antennomere 3 ca. 5 times longer than antennomere 2 and ca. 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 2.4 times, flabellum of antennomere 4 ca. 3.6 times and flabellum of antennomere 5 ca. 3.8 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 77 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, with almost parallel and straight sides, slightly bisinuate basally and feebly triangularly projected anteriorly, with acute posterior and blunt anterior angles; median cell narrow, attaining anterior margin, very narrow in anterior fourth; lateral carinae almost straight, inconspicuous internally; anterior cells not diverging anteriorly, formed by inconspicuous straight antero-lateral carinae. Mesothoracic spiracle relatively large, oval, not hooded. Scutellum transverse, parallel-sided, semi-circularly emarginate at apex (Plate 77 fig. 4). Elytra long, ca. 3.6 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices with double rows of small regular, mostly elongate cells; bottom of cells hairless; pubescence short and decumbent (Plate 77 fig. 4). Tibiae and femoris narrow, straight; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad. Male aedeagus with narrow, slightly curved in distal half, slightly widening distally median lobe; inner sac with circularly arranged seven prominent thorns, without evident trunk; phallobasal mem-



brane elongate, semi-sclerotized, ca. 0.5 length of median lobe (Plate 77 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Metriorrhynchus vitiosus* sp. nov. may be easily distinguished from the congeners by the combination of coloration and long antennal flabellae, as well as by the lack of evident trunk and circularly arranged prominent thorns of the inner sac of the aedeagus, with elongate and semi-sclerotized phallobasal membrane (Plate 77 figs 4-6).

Distribution: Known only from Madang, Papua New Guinea.

Porrostoma **Laporte, 1838**

Porrostoma Laporte, 1838: 26.

Type species: *Lycus rufipennis* Fabricius, 1801, by monotypy.

Notes: The genus *Porrostoma* Laporte, 1838 is widespread in New Guinea, but is most species-rich in Australia. As it had long been considered synonymous to *Metriorrhynchus*, even the approximate number of its species is hard to estimate (Bocák 2002). Seven species from New Guinea were added to this genus recently (Kazantsev 2015b).

Distribution: Papuan and Australian regions (Kleine 1933; Bocák 2002).

Porrostoma cautiromimum **sp. nov.** (Plate 77 figs 7-9)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 17.V.1993, O. Missa leg.

Paratypes 3♂ ICM & ISNB: same label as in holotype, dates: 4.VI.1996; 24.VII.1996; 27.VII.1996; 1♀ ISNB: Papua New Guinea, Madang prov., Baiteta, fogging, 16.V.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the genus name *Cautires* Waterhouse, 1879 and the Latin for “mime”, alluding to its resemblance to the said genus.

Description: Length 9.1-11.0 mm. Width across humeri 2.1-3.0 mm.

Dark brown to black. Pronotum, scutellum and elytra ochre; abdomen with blue metallic tint. Rostrum moderately long. Vertex with prominent semi-circular impression behind antennal prominence. Eyes relatively small, interocular distance subequal in length to eye diameter. Labrum about as long as wide, rounded. Maxillary palps slender; ultimate palpomere elongate, slightly narrowed distally, oblique and glabrous at apex. Labial palps small; ultimate palpomere elongate, almost pointed and glabrous at apex. Antennal sockets separated by minute lamina. Antennae relatively short, hardly attaining to elytral third, from antennomere serrate; antennomere 3 ca. 5 times longer than antennomere 2 and 1.4 times longer than antennomere 4; antennomeres 3-11 with short dense sub-erect pubescence (Plate 77 fig. 7). Pronotum transverse, ca. 1.2 times as wide as long, trapezoidal, conspicuously bisinuate basally and moderately triangularly projected anteriorly, with conspicuous acute posterior and noticeable blunt anterior angles; median cell relatively narrow, extending to pronotal 0.8; lateral carinae inconspicuous near median cell, concave; anterior cells diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle prominent, slightly protruding, not hooded. Scutellum transverse, slightly narrowing distally, triangularly emarginate at apex (Plate 77 fig. 7). Elytra long, ca. 3.3 times longer than wide at humeri, slightly widening distally, with four equally developed primary costae; interstices with double rows of small regular transverse cells; bottom of cells hairless; pubescence dense, short and decumbent (Plate 77 fig. 7). Tibiae and femoris relatively broad, femoris straight, tibiae curved; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad. Male aedeagus with straight, relatively robust proximally, slightly constricted distally (in lateral view) and medially (in dorsal view) median lobe; inner sac with paired distal bulges; phallobasal membrane relatively short, attaining to 0.3 of median lobe (Plate 77 figs 8-9).

Sexual dimorphism: Female similar to male, but eyes somewhat smaller and antennae slightly less serrate.

Differential diagnosis: *Porrostoma cautiromimum* sp. nov. may be distinguished from the somewhat similar *P. echidna* Kazantsev, 2015 by the more *Cautires*-like pronotum, non-flabellate male antennae and more robust proximally median lobe of the aedeagus (Plate 77 figs 7-9).

Distribution: Known only from Madang, Papua New Guinea.

Porrostoma exile **sp. nov.** (Plate 77 figs 10-12)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 26.III.1993, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for “slender”, alluding to its appearance.

Description: Length 4.4 mm. Width across humeri 1.1 mm.

Dark brown. Pronotal sides narrowly light brown.

Rostrum short. Vertex with conspicuous impression behind antennal prominence. Eyes small, interocular distance ca. 1.6 times greater than eye diameter. Labrum transverse, trapezoidal, slightly concave anteriorly; epistoma truncate. Palps slender; ultimate palpomeres elongate, almost pointed and glabrous at apex. Antennal sockets separated by broad, densely pubescent lamina. Antennae attaining to elytral two thirds, from antennomere 3 broad, feebly serrate; antennomere 3 ca. 8 times longer than antennomere 2 and subequal in length to antennomere 4; antennomeres 3-11 with short sub-erect pubescence (Plate 77 fig. 10). Pronotum transverse, ca. 1.3 times as wide as long, medially convex basally and semi-circular anteriorly, with acute pubescent posterior and blunt anterior angles; median cell narrow, its sides contiguous in posterior third and anterior fourth, almost reaching anterior margin; lateral carinae prominent, attaining to posterior angles; anterior cells diverging anteriorly, formed by straight, inconspicuous near anterior margin antero-lateral carinae. Mesothoracic spiracle minute, not hooded. Scutellum subquadrate, parallel-sided, prominently emarginate at apex (Plate 77 fig. 10). Elytra long, ca. 3.4 times longer than wide at humeri, slightly narrowing distally, with primary costa 3 conspicuously weaker in distal half; interstices 1 and 5 with double rows of small irregular roundish cells, interstice 2 with single row of cells in medial third, interstices 3 and 4 with single rows of cells in distal two thirds; bottom of cells hairless; pubescence scarce, short and decumbent (Plate 77 fig. 10). Tibiae and femoris straight, femoris moderately broad, tibiae narrow; tarsomere 4 widened, tarsomeres 1-4 with plantar pad. Male aedeagus with straight narrow median lobe, slightly curved apically in lateral view; inner sac with paired lateral coiled bulges provided with minute thorns and apical elongate bulge with minute thorns and separate long erect hairs; phallobasal membrane sclerotized, narrow, attaining to ca. 0.6 of median lobe (Plate 77 figs 11-12).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma exile* sp. nov. may be distinguished from the congeners by the combination of coloration, elytral reticulation, broad and feebly serrate antennomeres, as well as by the straight narrow median lobe of the aedeagus and paired lateral coiled bulges with minute thorns and apical elongate bulge with minute thorns and separate long erect hairs of the inner sac and elongate sclerotised phallobasal structure (Plate 77 figs 10-12). In the elytral reticulation *P. exile* sp. nov. is quite unlike most other members of the genus, resembling only *P. mystax* sp. nov. and *Procautires multipilosus* Kazantsev, 2016, also from Baiteta, Madang, Papua New Guinea, especially in the structure of male genitalia. It is possible that these three species form a monophyletic lineage within *Porrostoma*.

Distribution: Known only from Madang, Papua New Guinea.

***Porrostoma fuscum* sp. nov.** (Plate 78 figs 1-3)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 25.VI.1993, O. Missa leg.

Paratypes 153♂ ICM & ISNB: same label as in holotype, but 31.III.1993; 22.IV.1993; 17.V.1993; 16.IV.1994; 16.IV.1995; from 9.IV.1996 to 27.VII.1996; 4♂ ISNB: Papua New Guinea, Madang prov., Baiteta, fogging, O. Missa leg; dates: 14.V.1996; 16.V.1996.

Derivatio nominis: The name of the new species is derived from the Latin for “brown”, alluding to its coloration.

Description: Length 8.6-9.5 mm. Width across humeri 1.6-2.1 mm.

Dark brown to black. Metaventrite and trochanters testaceous. Rostrum short. Vertex with prominent roundish impression and median keel behind antennal prominence. Eyes relatively large, interocular distance ca. 1.2 times shorter than eye diameter. Labrum wider than long, narrowing anteriorly, slightly emarginate medially; epistoma concave. Palps slender; ultimate palpomeres elongate, narrow, slightly narrowed distally, glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere flabellate; antennomere 3 ca. 5 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 2.1 times, flabellum of antennomere 4 ca. 2.4 times and flabellum of antennomere 5 ca. 2.3 times longer than relevant antennal stem; antennomeres 3-11 with short scarce sub-erect pubescence (Plate 78 fig. 1). Pronotum transverse, ca. 1.25 times as wide as long, trapezoidal, bisinuate basally and moderately triangularly projected anteriorly, with slightly concave sides, conspicuous acute laterally projected posterior and noticeable blunt anterior angles; median cell narrow, extending to pronotal 0.7; lateral carinae nearly straight; anterior cells diverging anteriorly, formed by concave anterolateral carinae. Mesothoracic spiracle prominent, slightly protruding, not hooded. Scutellum transverse, slightly narrowing distally, feebly emarginate at apex (Plate 78 fig. 1). Elytra long, ca. 3.5 times longer than wide at humeri, parallel-sided, with four strong, equally developed primary costae; interstices with double rows of regular subquadrate cells; bottom of cells glabrous; pubescence minute and decumbent (Plate 78 fig. 1). Tibiae and femoris narrow and straight; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad. Male aedeagus with straight, narrow, widened distally median lobe; inner sac with relatively small paired distal bulges; phallobasal membrane elongate, relatively long, attaining to ca. 0.45 of median lobe (Plate 78 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma fuscum* sp. nov. may be distinguished from the morphologically similar *P. loriae* (Kleine, 1926), comb. nov. by the uniformly dark brown to black coloration and considerably more narrow median lobe of the aedeagus (Plate 78 figs 1-3).

Variation. In some paratypes the pronotal margins and carinae are testaceous.

Notes: In spite of the rather big series of males of this species (about 160 specimens), no females were found in the material.

Distribution: Known only from Madang, Papua New Guinea.

***Porrostoma gigivagum* sp. nov.** (Plate 78 figs 4-8)

Holotype ♂ NME: E Indonesia, W New Guinea, Doberai Peninsula, Arfak Mts., S of Anggi Gigi Lake, env. vill. Uper, 01°18'05"S, 133°54'24"E, 2200 m, primary mid-montane rainforest, white light, 10-11.IX.2015, leg. D.Telnov.

Derivatio nominis: The name of the new species is derived from the locality name (Anggi Gigi Lake) and the Latin for "dweller".

Description: Length 10.6 mm. Width across humeri 2.2 mm.

Dark brown to black. Pronotum and scutellum orange testaceous; elytra, except narrow apical edge, ochre. Rostrum absent. Vertex with transverse impression and fine median keel behind antennal prominence. Eyes relatively large, interocular distance subequal in length to eye diameter. Labrum transverse, rounded at anterior margins, truncate anteriorly. Palps slender; ultimate palpomeres elongate, almost parallel-sided. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere 3 flabellate; antennomere 3 ca. 7 times longer than antennomere 2 and subequal in length to antennomere 4; flabellum of antennomere 3 ca. 1.1 times, flabellum of antennomere 4 ca. 1.5 times and flabellum of antennomere 5 ca. 1.4 times longer than relevant antennal stem; antennomeres 3-11 with short erect pubescence (Plate 78 fig. 4). Pronotum transverse, ca. 1.2 times as wide as long, trapezoidal, with somewhat concave sides, slightly bisinuate basally and semi-circularly projected anteriorly, with laterally projected acute posterior and noticeable blunt anterior angles; median cell narrow, extending to pronotal 0.7; lateral carinae concave; anterior cells slightly diverging anteriorly, formed by slightly curved outwardly near anterior margin antero-lateral carinae. Mesothoracic spiracle hooded; hood small, narrow, erect. Scutellum subquadrate, parallel-sided, triangularly emarginate at apex (Plate 78 fig. 4). Elytra long, ca. 3.7 times longer than wide at humeri, slightly widening distally, with four equally developed primary costae; interstices with double rows of small regular, mostly elongate cells; pubescence dense, short and decumbent (Plate 78 fig. 4). Tibiae and femoris narrow, straight; tarsomeres 2-4 widened, tarsomeres 1-4 with prominent plantar pad. Male ultimate sternite with brush of longer setae ventrally, proximally short and conspicuously widened and rounded (Plate 78 figs 5-6). Penultimate tergite single, not divided by median suture (Plate 78 fig. 6). Aedeagus with straight, gradually widening distally median lobe, distal opening occupying ca. 0.2 its length; inner sac with circular distal bulge provided with dense minute thorns; phallobasal membrane small, ca. 8 times shorter than median lobe (Plate 78 figs 7-8).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma gigivagum* sp. nov. may be easily distinguished from the congeners by the absent rostrum, relatively long antennae and narrow proximally and gradually widening distally median lobe of the aedeagus, as well as by the inner sac with circular distal bulge provided with dense minute thorns (Plate 78 figs 4-8). It additionally differs from the somewhat similarly coloured *P. cautiromimum* sp. nov. by the absent rostrum, flabellate antennae, shape of pronotum and straight narrow tibiae.

Distribution: Known only from the Arfak Mountains in Indonesian New Guinea.

***Porrostoma loriae* (Kleine, 1926) comb. nov.**

Cladophorus loriae Kleine, 1926: 127.

Material ca. 250♂ & 2♀ ICM & ISNB: Papua New Guinea, Madang prov., Baiteta, light, O. Missa leg, dates: 18.III.1993 to 19.V.1993; from 23.IV.1995 to 2.VII.1995; from 9.IV.1996 to 27.VII.1996; 2♂: Papua New Guinea, Madang prov., Baiteta, fogging, O. Missa leg; dates: 14.V.1996; 16.V.1996.

Notes: The description of *Cladophorus loriae* Kleine, 1926, supplemented with an illustration (Kleine, 1926), demonstrates that the species does not belong in *Cladophorus*, but rather in *Porrostoma*, according to the rectified concept of the two genera (Bocák 2002). Hence, the taxon is transferred to *Porrostoma* as *Porrostoma loriae* (Kleine, 1926) comb. nov.

Distribution: Paumomu River, New Guinea (Kleine 1926); Madang, Papua New Guinea.

***Porrostoma mutum* sp. nov.** (Plate 78 figs 9-11)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, V.1993, O. Missa leg.

Paratypes 2♂ ICM & ISNB: Papua New Guinea, Madang prov., Baiteta, fogging, 8.VI.1994, O. Missa leg.; Papua New Guinea, Madang prov., Baiteta, light, 30.V.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for “dumb”, alluding to its appearance.

Description: Length 6.0-6.3 mm. Width across humeri 1.35-1.40 mm.

Dark brown. Head dorsally black; antennomeres 1-2, frons and pronotal sides light brown. Rostrum short. Vertex with deep semi-circular impression behind antennal prominence. Eyes small, interocular distance ca. 1.7 times greater than eye diameter. Labrum about as long as wide, rounded. Maxillary palps slender; ultimate palpomere elongate, oblique and glabrous at apex. Labial palps small; ultimate palpomere elongate, pointed and glabrous at apex. Antennal sockets separated by relatively broad lamina. Antennae attaining to elytral three fifths, from antennomere 3 flabellate; antennomere 3 ca. 5 times longer than antennomere 2 and 1.2 times longer than antennomere 4; flabellum of antennomere 3 ca. 2.7 times, flabellum of antennomere 4 ca. 4.2 times and flabellum of antennomere 5 ca. 3.7 times longer than relevant antennal stem; antennomeres 3-11 with short decumbent pubescence (Plate 78 fig. 9). Pronotum transverse, ca. 1.2 times as wide as long, parallel-sided, almost straight basally and semi-circular anteriorly, with straight posterior and rounded anterior angles; median cell obscure, extending to pronotal 0.6; lateral carinae broad, oblique, obscure near median cell; anterior cells not diverging anteriorly, formed by broad, straight, obliterate in anterior half antero-lateral carinae. Mesothoracic spiracle prominent, slightly protruding, not hooded. Scutellum transverse, rounded, semi-circularly emarginate at apex (Plate 78 fig. 9). Elytra long, ca. 3.4 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices with double rows of small irregular subquadrate cells; bottom of cells hairless; pubescence scarce, short and decumbent (Plate 78 fig. 9). Tibiae and femoris straight, femoris moderately broad, tibiae narrow; tarsomeres 2-4 widened, with plantar pad (tarsomere 1 with apical plantar pad). Male aedeagus with narrow proximally, gradually widened distally median lobe; in lateral view median lobe bent in distal half semi-circularly widened apically; inner sac with paired distal and single proximal bulges provided with series of thorns; phallobasal membrane semi-sclerotized, narrow, attaining to ca. 0.6 of median lobe (Plate 64 figs 10-11).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma mutum* sp. nov. may be distinguished from the congeners by the combination of coloration, long flabellae of male median antennomeres, long curved median lobe of the aedeagus and paired distal inner sac bulges with series of thorns (Plate 78 figs 9-11).

Distribution: Known only from Madang, Papua New Guinea.

***Porrostoma mystax* sp. nov.** (Plate 79 figs 1-3)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 18.VII.1996, O. Missa leg.

Paratypes 2♂ ICM & ISNB: Papua New Guinea, Madang prov., Baiteta, fogging, 1.V.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Old Greek for “moustache”, alluding to its relatively long inner sac whiskers.

Description: Length 5.2-6.2 mm. Width across humeri 1.2-1.5 mm.

Dark brown to black; frons, pronotal sides and trochanters light brown. Vertex with deep transverse excavation behind antennal prominence. Eyes relatively small, interocular distance ca. 1.5 times greater than eye diameter. Labrum elongate, semi-oval. Palps slender; ultimate palpomeres elongate, pointed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral two thirds, from antennomere 3 feebly dentate; antennomere 3 ca. 6 times longer than antennomere 2 and 1.15 times longer than antennomere 4; antennomeres 3-11 with short decumbent pubescence and longer pre-apical and apical bristles (Plate 79 fig. 1). Pronotum transverse, ca. 1.2 times as wide as long, with almost straight sides, almost straight basally and triangularly projected anteriorly, with acute posterior and conspicuous blunt anterior angles; median cell narrow, extending to anterior margin; lateral carinae slightly convex; anterior cells slightly diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, short, not hooded. Scutellum subquadrate, parallel-sided, deeply emarginate at apex (Plate 79 fig. 1). Elytra long, ca. 3.8 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices 1-2 with one row of cells in third fourth; interstices 3-4 with double rows of cells only at proximal fifths; dense pubescence short and decumbent (Plate 79 fig. 1). Tibiae and femoris straight, narrow; tarsomeres 3-4 widened, with complete plantar pad (tarsomeres 1-2 with minute apical plantar pad). Male aedeagus with narrow, slightly bent in lateral view median lobe; inner sac with conspicuous lateral teeth and long whiskers; phallobase with elongate, fully sclerotised parameres-like process, semi-enveloping median lobe and constituting ca. 0.6 length of median lobe (Plate 79 figs 2-3).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma mystax* sp. nov. can be separated from the habitually similar *P. exile* sp. nov. by the long, narrow, slightly bent in lateral view median lobe of the aedeagus, with long inner sac whiskers (Plate 79 figs 2-3). By the shape of the aedeagus the new species also resembles *Procautires multipilosus* Kazantsev, 2016, differing by the slenderer body, more transverse pronotum, as well as by the conspicuously less pilose and noticeably bent median lobe of the aedeagus.

Distribution: Known only from Madang, Papua New Guinea.

***Porrostoma semiflavum* sp. nov.** (Plate 79 figs 4-6)

Holotype ♂ NME: E Indonesia, Irian Jaya, 35 km S Nabire, Topo Bumi R., 150 m, 13.I.1996, A. Weigel leg.

Paratypes 2♂ ICM & NME: E Indonesia, Irian Jaya, 50 km S Nabire, Ilaga Road, Station Pusppenssat, 300 m, 03°29.5'S, 135°43.8'E, VIII-IX.1991, P. Hoyes leg.; E Indonesia, Irian Jaya, 50 km S Nabire, Pusppenssat, 750 m, 31.XII.1997, A. Weigel leg.

Derivatio nominis: The name of the new species is derived from the Latin for “half yellow”, alluding to its coloration.

Description: Length 11.0-12.8 mm. Width across humeri 2.8-2.9 mm.

Dark brown to black. Antennomere 1 proximally, antennomere 2, pronotal disk, elytral proximal fifth, scutellum distally, ventrum, trochanters, tibiae proximally and internally testaceous. Rostrum short. Vertex with prominent transverse oval impression behind antennal prominence. Eyes moderately large, interocular distance subequal in length to eye diameter. Labrum transverse, rounded anteriorly; epistoma concave. Palps slender; ultimate palpomeres elongate, narrow, narrowed distally, glabrous at apex. Antennal sockets separated by minute lamina. Antennae attaining to elytral two thirds, from antennomere flabellate; antennomere 3 ca. 12 times longer than antennomere 2 and ca. 1.4 times longer than antennomere 4; flabellum of antennomere 3 ca. 1.1 times, flabellum of antennomere 4 ca. 1.7 times and flabellum of antennomere 5 ca. 1.6 times longer than relevant antennal stem; antennomeres 3-11 with short dense decumbent pubescence (Plate 79 fig. 4). Pronotum transverse, ca. 1.3 times as wide as long, noticeably narrowing anteriorly, bisinuate basally and moderately semicircularly projected anteriorly, with convex sides, minute pointed posterior and noticeable blunt anterior angles; median cell narrow, extending ca. to pronotal 0.75; lateral carinae curved; anterior cells diverging anteriorly, formed by outwardly curved antero-lateral carinae. Mesothoracic spiracle prominent, slightly protruding, not hooded. Scutellum transverse, narrowing distally, triangularly emarginate at apex (Plate 79 fig. 4). Elytra long, ca. 3 times longer than wide at humeri, slightly widening distally, with four strong, equally developed primary costae; interstices with double rows of regular mostly transverse rectangular cells; bottom of cells glabrous; pubescence minute and decumbent (Plate 79 fig. 4). Tibiae and femoris straight, femoris relatively broad, tibiae narrow; tarsomeres 2-4 widened, plantar pad on tarsomeres 1-4, in tarsomere 1 occupying ca. half its length. Male aedeagus with straight, narrow, slightly widened distally median lobe; inner sac with paired lateral and vertical distal bulges; phallobasal membrane elongate, oval, attaining to ca. 0.4 of median lobe (Plate 79 figs 5-6).

Sexual dimorphism: Female is unknown.

Differential diagnosis: *Porrostoma semiflavum* sp. nov. may be distinguished from the morphologically similar *P. loriae* (Kleine, 1926), comb. nov. and *P. fuscum* sp. nov. by the coloration, convex pronotal sides, pointed posterior pronotal angles and shorter antennal flabellae, as well as by the only slightly widened distally median lobe of the aedeagus with more prominent inner sac bulges (Plate 79 figs 4-6).

Variation. In one of the paratypes the pronotum is entirely testaceous and only half of elytra is black.

Distribution: Known only from Irian Jaya, Indonesian New Guinea.

***Procautires* Kleine, 1925**

Procautires Kleine, 1925: 32.
Type species: *P. toxopei* Kleine, 1925: 32, by monotypy.

Notes: The genus *Procautires* Kleine, 1925 is one of the endemics of the Australian and Papuan regions. Twenty seven species of this genus have so far been known, with twenty six recorded in New Guinea and on the adjacent islands (Kleine 1926; 1933; 1935; Bocák 2002; Kazantsev 2016a).

***Procautires cirratus* sp. nov.** (Plate 79 figs 7-9)

Holotype ♂ ICM: Papua New Guinea, 10 km N Madang, 2 km NNW Riwo, 9-11.II.1989, M. & R. Holyński leg.

Derivatio nominis: The name of the new species is derived from the Latin for "curly-haired", alluding to its inner sac cirri.
Description: Length 4.5 mm. Width across humeri 1.0 mm.
Uniformly dark brown to black. Vertex with two small deep oblique impressions behind antennal prominence. Eyes small, interocular distance ca. 1.7 times greater than eye diameter. Labrum small, transverse, rounded anteriorly. Palps slender; ultimate palpomeres elongate, pointed and glabrous at apex. Antennal sockets separated by narrow lamina. Antennae attaining to elytral three fourths, from antennomere 3 dentate; antennomere 3 ca. 6 times longer than antennomere 2 and 1.1 times shorter than antennomere 4; antennomeres 3-11 with relatively long sub-erect pubescence (Plate 79 fig. 7). Pronotum transverse, ca. 1.2 times as wide as long, with almost straight sides, slightly concave before posterior angles, bisinuate basally and convex anteriorly, with acute posterior and inconspicuous blunt anterior angles; median cell relatively narrow, extending to 0.75 pronotal length; lateral carinae slightly convex; anterior cells slightly diverging anteriorly, formed by straight and narrow antero-lateral carinae. Mesothoracic spiracle small, short, not hooded. Scutellum transverse, parallel-sided, deeply and broadly emarginate at apex (Plate 79 fig. 7). Elytra long and narrow, ca. 3.75 times longer than wide at humeri, almost parallel-sided, only slightly concave in the middle, with four equally developed primary costae; interstices 1 and 5 with double rows of irregular subquadrate cells; interstice 2 with double rows of cells only at proximal and distal fifths; interstices 3-4 with double rows of cells only at proximal fifths; bottom of cells hairless, glabrous; pubescence short and semi-erect (Plate 79 fig. 7). Tibiae and femoris straight, narrow; tarsomeres 3-4 widened, with complete plantar pad. Male aedeagus with narrow, only slightly widened before apex median lobe, with apparent inner sac cirri (Plate 79 figs 8-9).
Sexual dimorphism: Female is unknown.
Differential diagnosis: *Procautires cirratus* sp. nov. resembles *P. aflabellatus* Kazantsev, 2016, but is easily separable by the slenderer body, smaller eyes, as well as by the narrow, only slightly widened before apex median lobe of the aedeagus, with apparent inner sac cirri (whiskers) (Plate 79 figs 7-9).
Distribution: Known only from Madang, Papua New Guinea.

***Procautires fuscicolor* sp. nov.** (Plate 79 figs 10-12)

Holotype ♂ ISNB: Papua New Guinea, Madang prov., Baiteta, light, 26.VI.1996, O. Missa leg.

Derivatio nominis: The name of the new species is derived from the Latin for "dark" and "colour", alluding to its coloration.
Description: Length 5.3 mm. Width across humeri 1.2 mm.
Uniformly dark brown to black. Vertex with transverse groove and two small deep round impressions behind antennal prominence. Eyes moderately large, interocular distance ca. 1.2 times greater than eye diameter. Labrum short, transverse, rounded anteriorly. Palps slender; ultimate palpomeres elongate, greatly narrowed, flattened and glabrous at apex. Antennal sockets separated by minute lamina. Antennae almost attaining to elytral five sixths, from antennomere 3 dentate; antennomere 3 ca. 7 times longer than antennomere 2 and ca. 1.15 times shorter than antennomere 4; antennomeres 3-11 with short decumbent pubescence (Plate 79 fig. 10). Pronotum transverse, ca. 1.3 times as wide as long, slightly narrowing distally, concave before posterior angles, slightly bisinuate basally and noticeably projected anteriorly, with acute posterior and conspicuous blunt anterior angles; median cell relatively broad, extending to 0.65 pronotal length; lateral carinae slightly convex; anterior cells broad, diverging anteriorly, formed by straight antero-lateral carinae. Mesothoracic spiracle small, short, not hooded. Scutellum about as long as wide, trapezoidal, semicircularly emarginate at apex (Plate 79 fig. 10). Elytra long, ca. 3.5 times longer than wide at humeri, parallel-sided, with four equally developed primary costae; interstices 1 and 5 with double rows of irregular subquadrate cells at proximal; interstices 2-3 with single row of cells in the middle fourth; pubescence short and decumbent (Plate

79 fig. 10). Tibiae and femoris straight, narrow, subequal in length; tarsomeres 3-4 widened, with complete plantar pad (tarsomeres 1-2 with apical plantar pad). Male aedeagus with straight, almost parallel-sided, but noticeably widened before apex median lobe (Plate 79 figs 11-12).

Sexual dimorphism: Female is unknown.

Differential diagnosis: As the previous species, *Procautires fuscicolor* sp. nov. also resembles *P. aflabellatus* Kazantsev, 2016, separable by the more dentate antennae, smaller eyes, wider and shorter median pronotal cell, as well as by the noticeably widened before apex median lobe of the aedeagus (Plate 79 figs 10-12).

Distribution: Known only from Madang, Papua New Guinea.

Acknowledgements

It is my pleasant duty to express gratitude to Dr. P. Grootaert (ISNB), M. Hartmann (NME) and Dr. D. Telnov (The Entomological Society of Latvia, Rīga), through whose courtesy I was able to study the Lycidae collections under their care. My sincere thanks are also due to Dr. R. Holyński (Milanowek, Poland), Dr. A. Kopetz (Kerspleben, Germany), Mr. V. Siniaev and Dr. V. Tuzov (both - Moscow, Russia) for providing interesting additional material collected during their entomological expeditions to New Guinea and adjacent islands.

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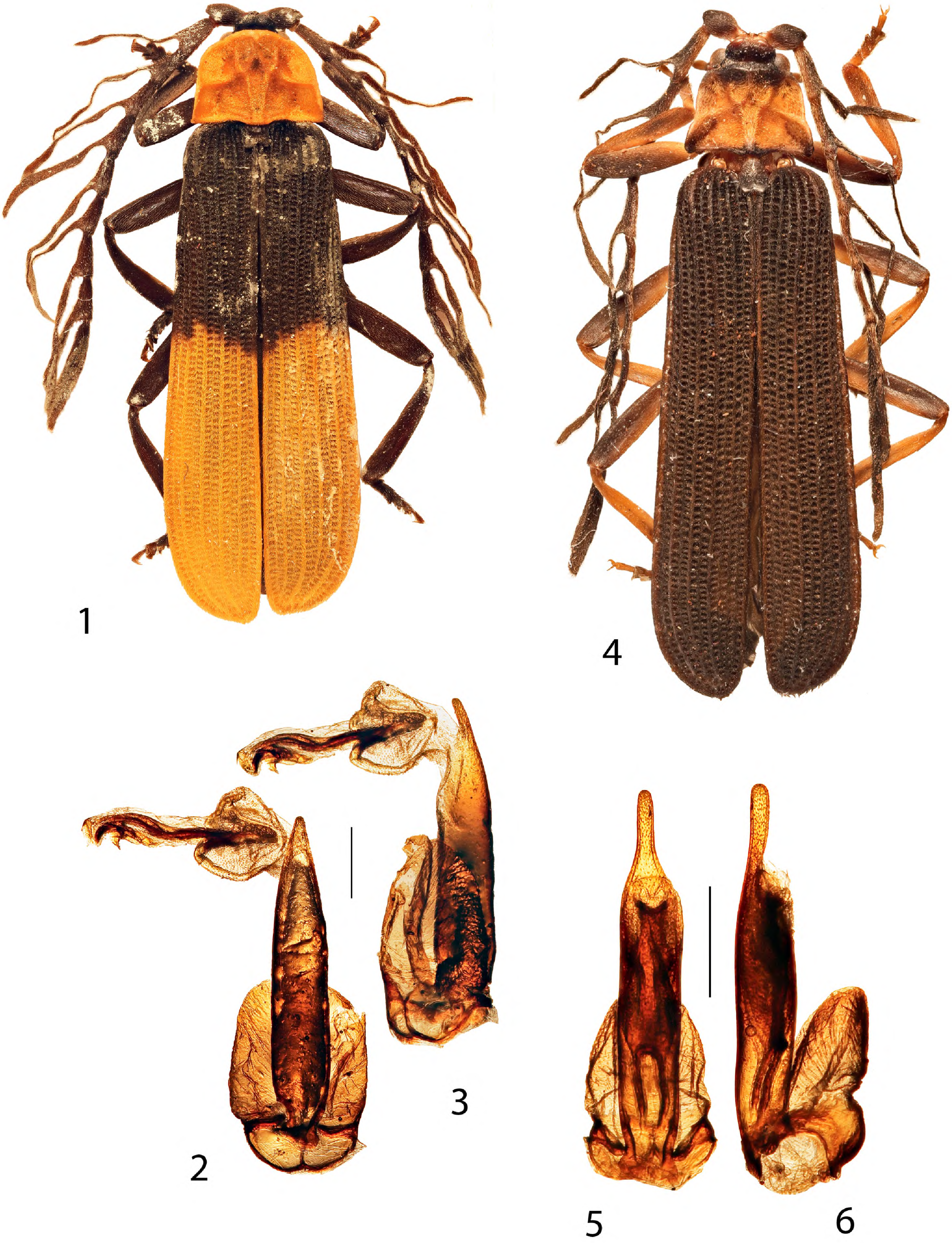
Received: 05.09.2016.

Plate 62

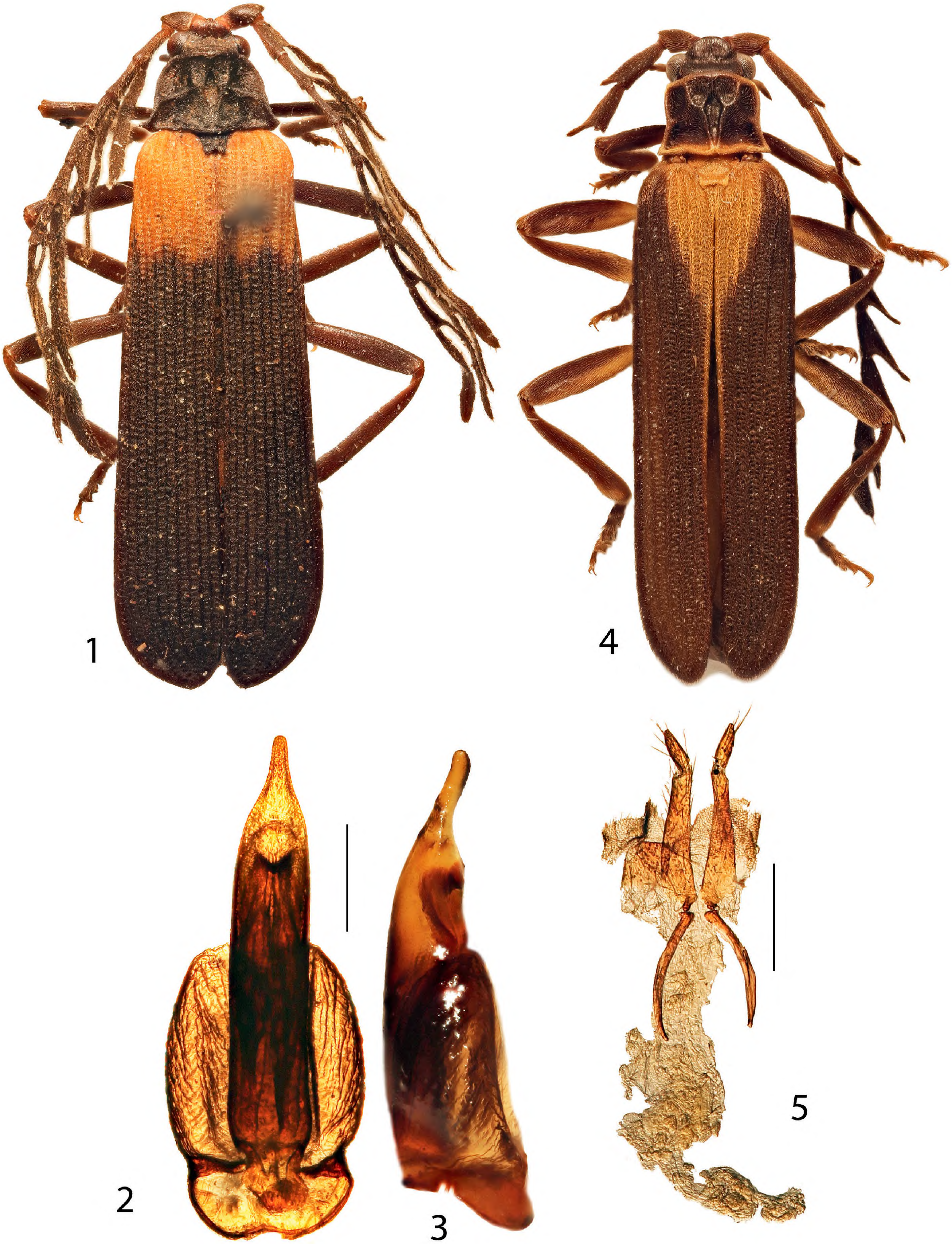
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-6. General view and aedeagi of *Cladophorus*, males. 1-3 – *C. formosus* Guerin-Meneville, 1830; 4-6 – *C. avicollaris* sp. nov., holotype; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi (2-3 with extracted inner sac): 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

Plate 63

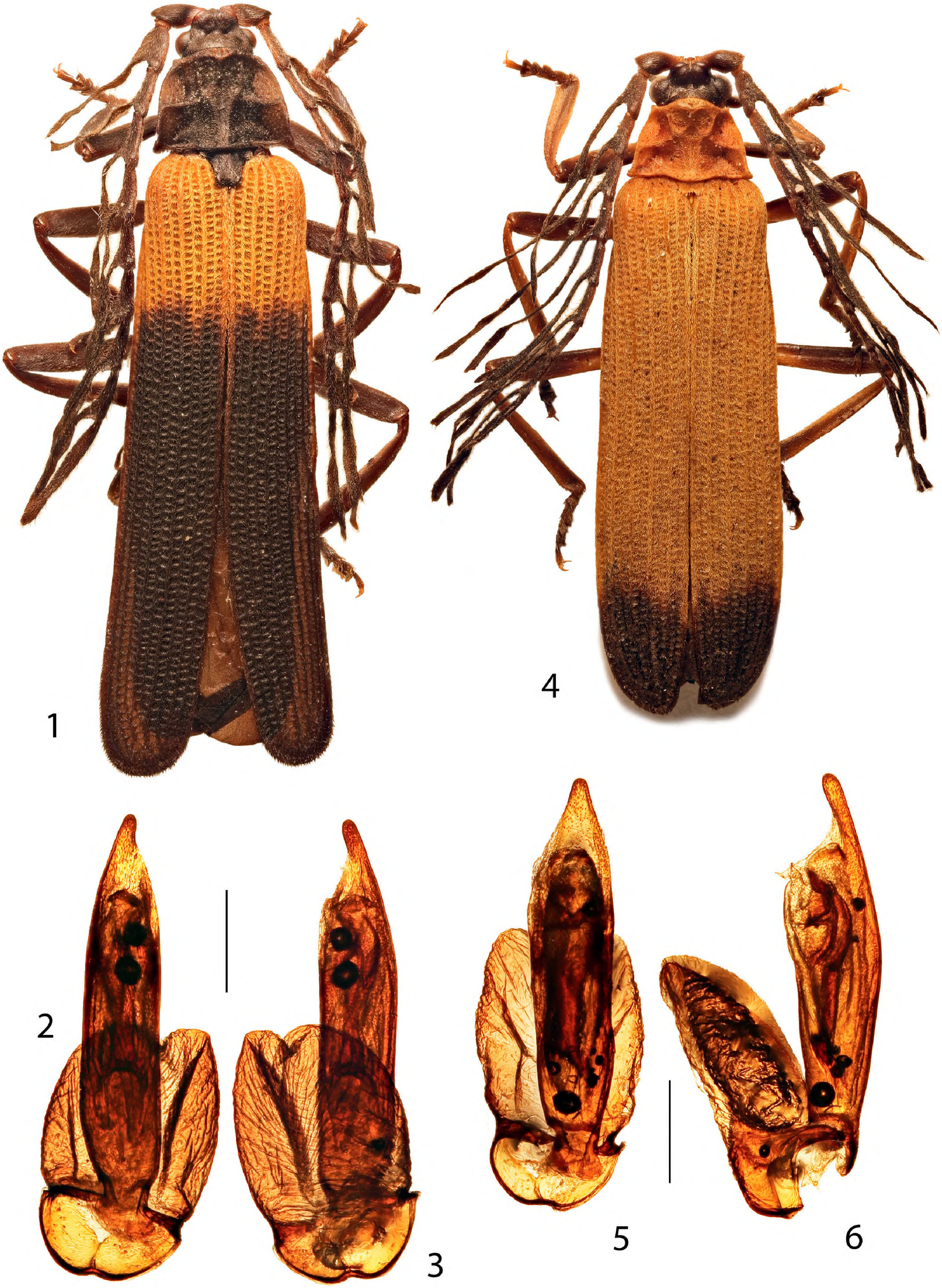
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-5. General view and details of *Cladophorus*, holotypes. 1-3 – *C. bupuensis* sp. nov., ♂; 4-5 – *C. flavoscutellatus* sp. nov., ♀; 1, 4 – Habitus, dorsal view; 2-3 – Aedeagi: 5 – ♀ genitalia; 2, 5 – Dorsal view; 3 – Lateral view [scale bar 0.5 mm].

Plate 64

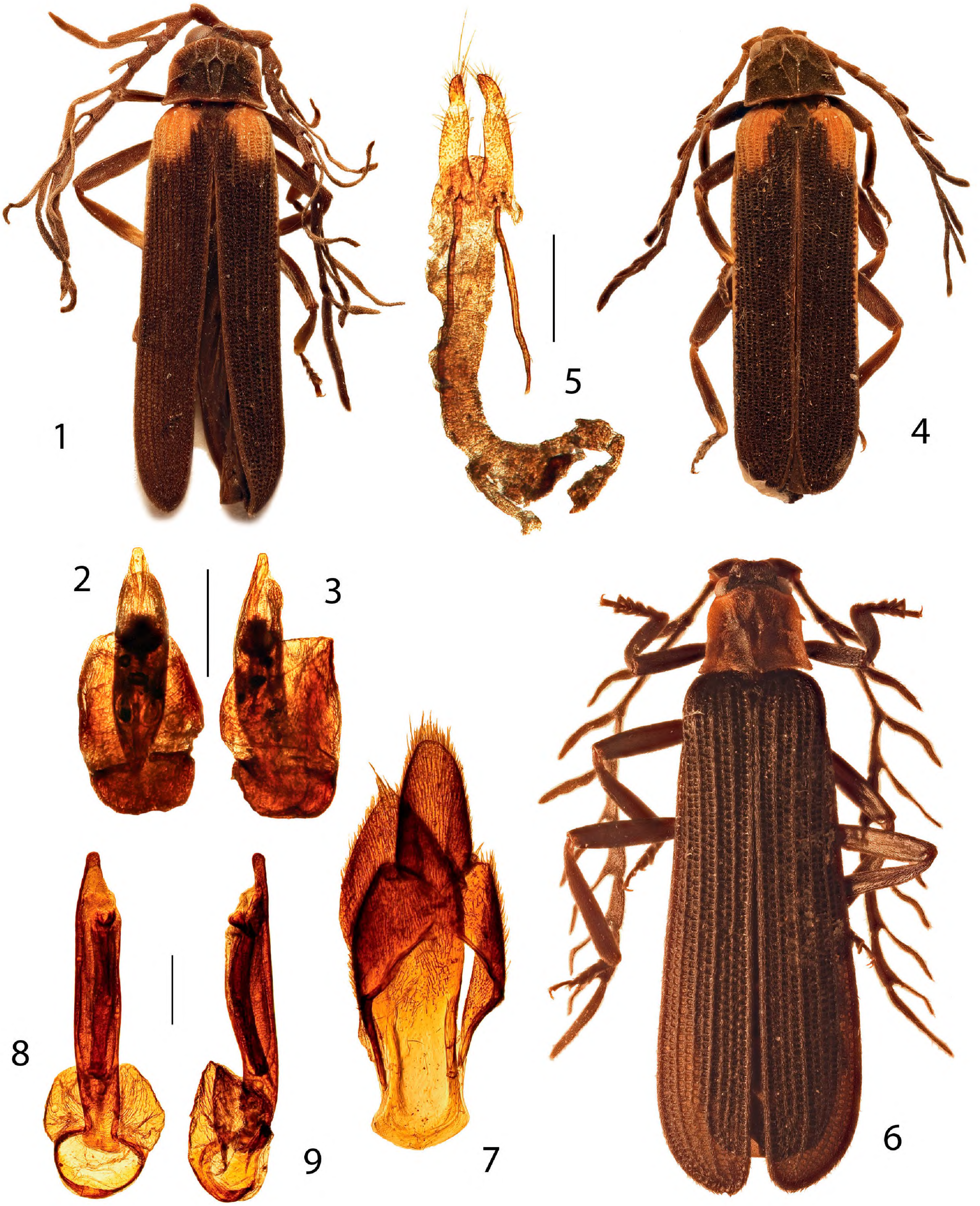
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-6. General view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. grekeae* sp. nov.; 4-6 – *C. holynskii* sp. nov.; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi: 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

Plate 65

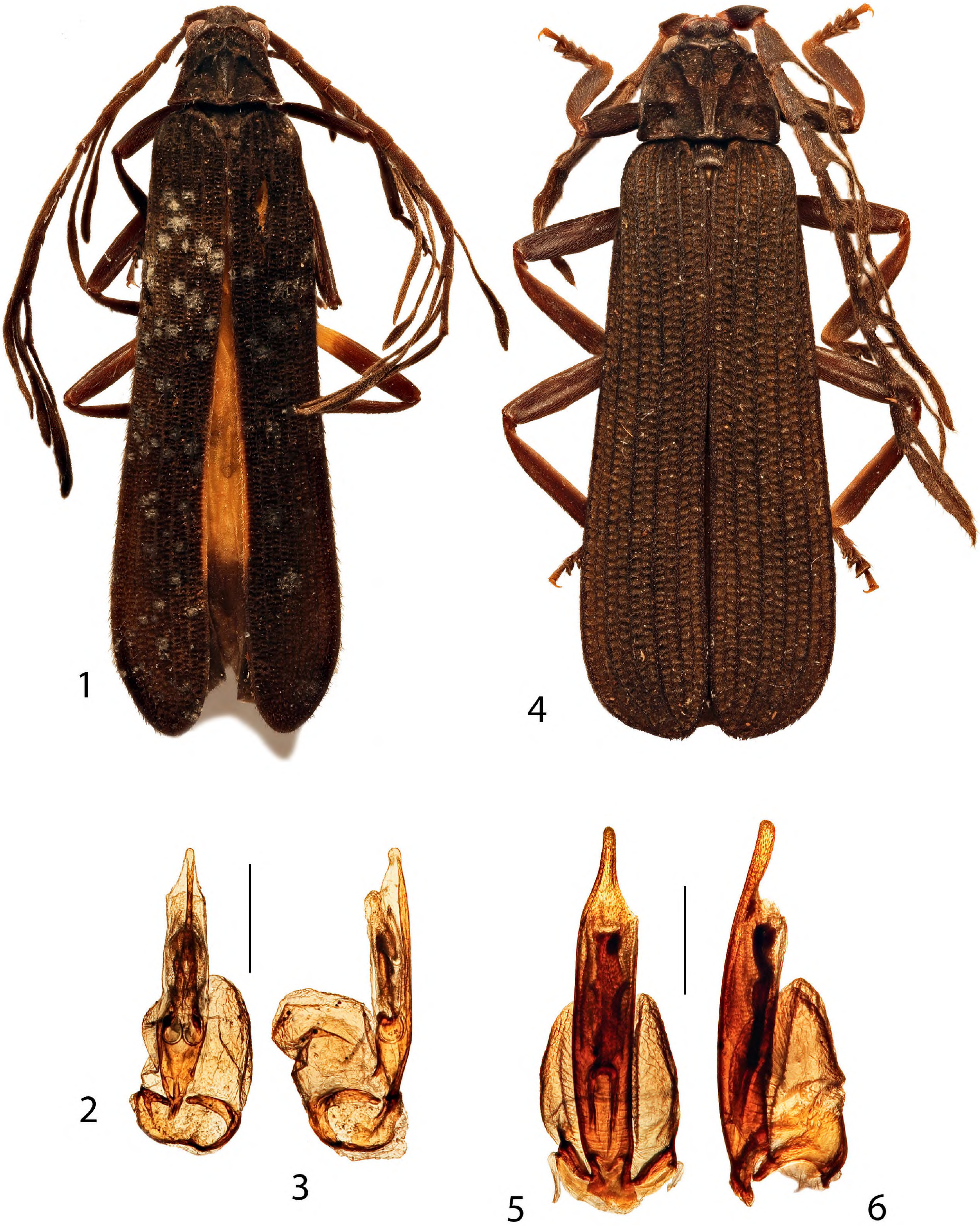
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-9. Habitus, dorsal view and details of *Cladophorus*. 1-5 – *C. humeralissimus* sp. nov.; 6-9 – *C. lacrimosus* sp. nov.; 1, 4, 6 – Habitus, dorsal view; 7 – Ultimate ventrites; 2-3, 8-9 – Aedeagus; 5 – ♀ genitalia; 1-3, 6-9 – Holotypes ♂♂; 4-5 – Paratype ♀; 2, 5, 8 – Dorsal view; 3, 9 – Lateral view [scale bar 0.5 mm].

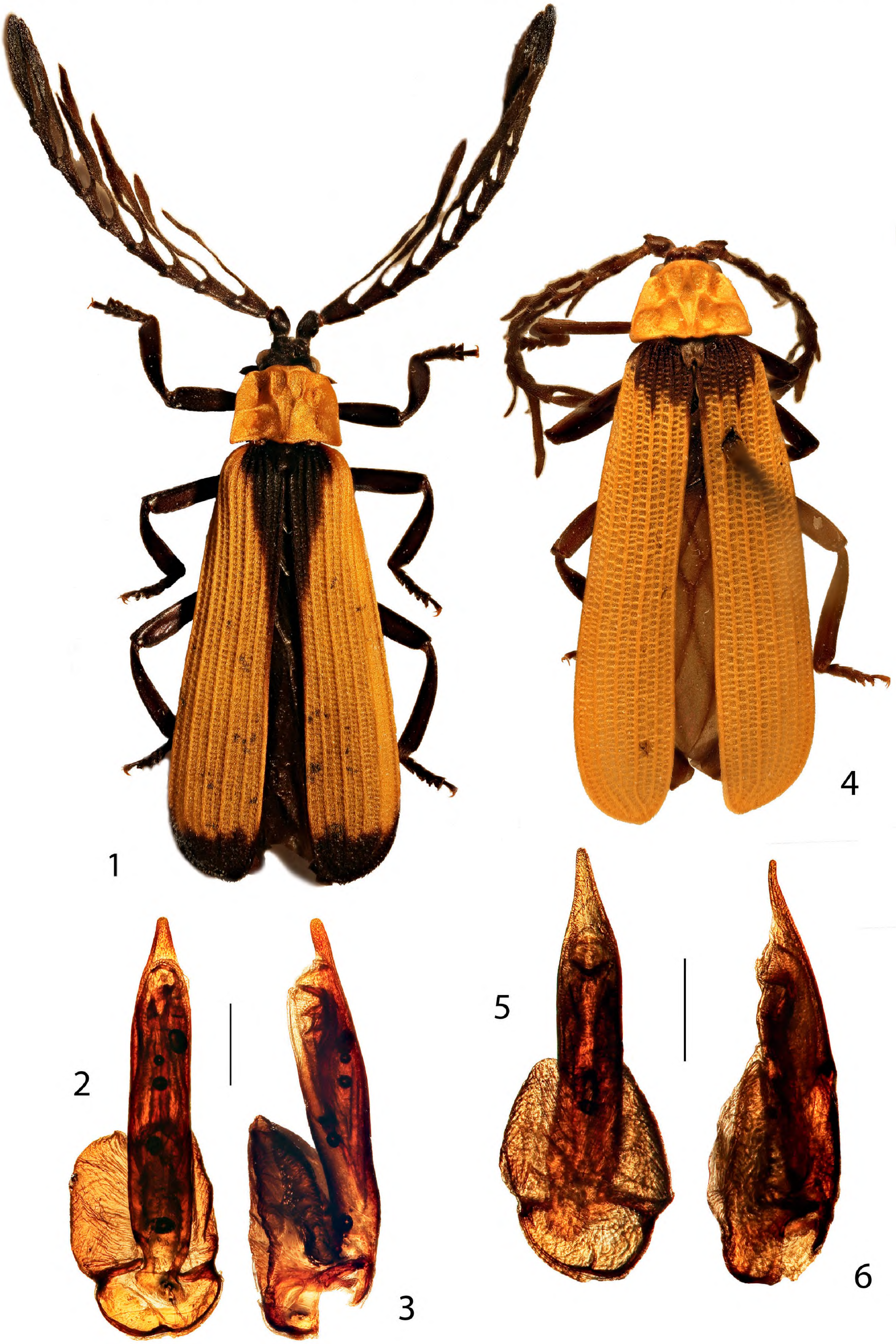
Plate 66

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-6. Habitus, dorsal view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. maurokitrinus* sp. nov.; 4-6 – *C. maurus* sp. nov.; 1, 4 – Habitus, dorsal view; 2-3, 5-6 –Aedeagi: 2, 4 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

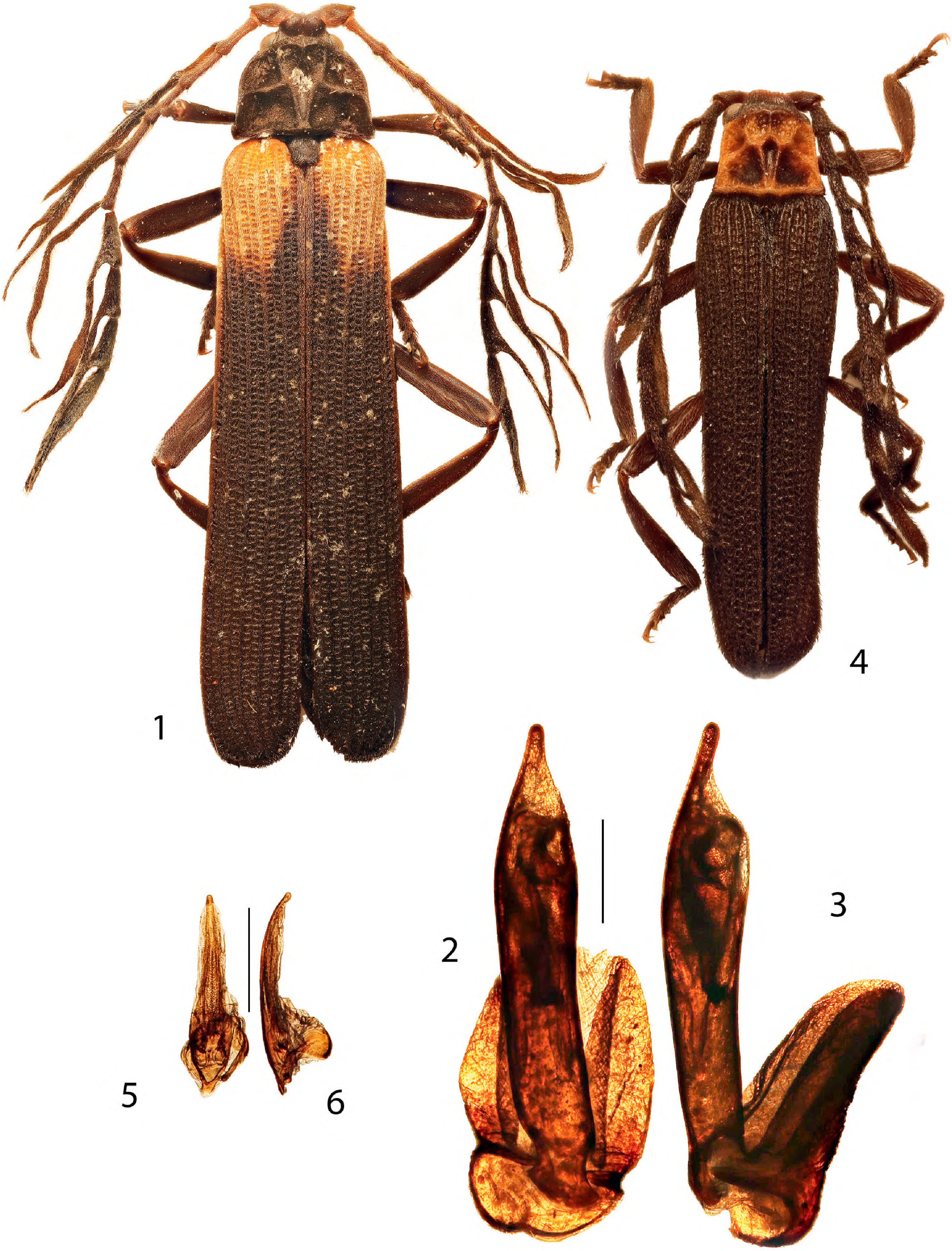
Plate 67



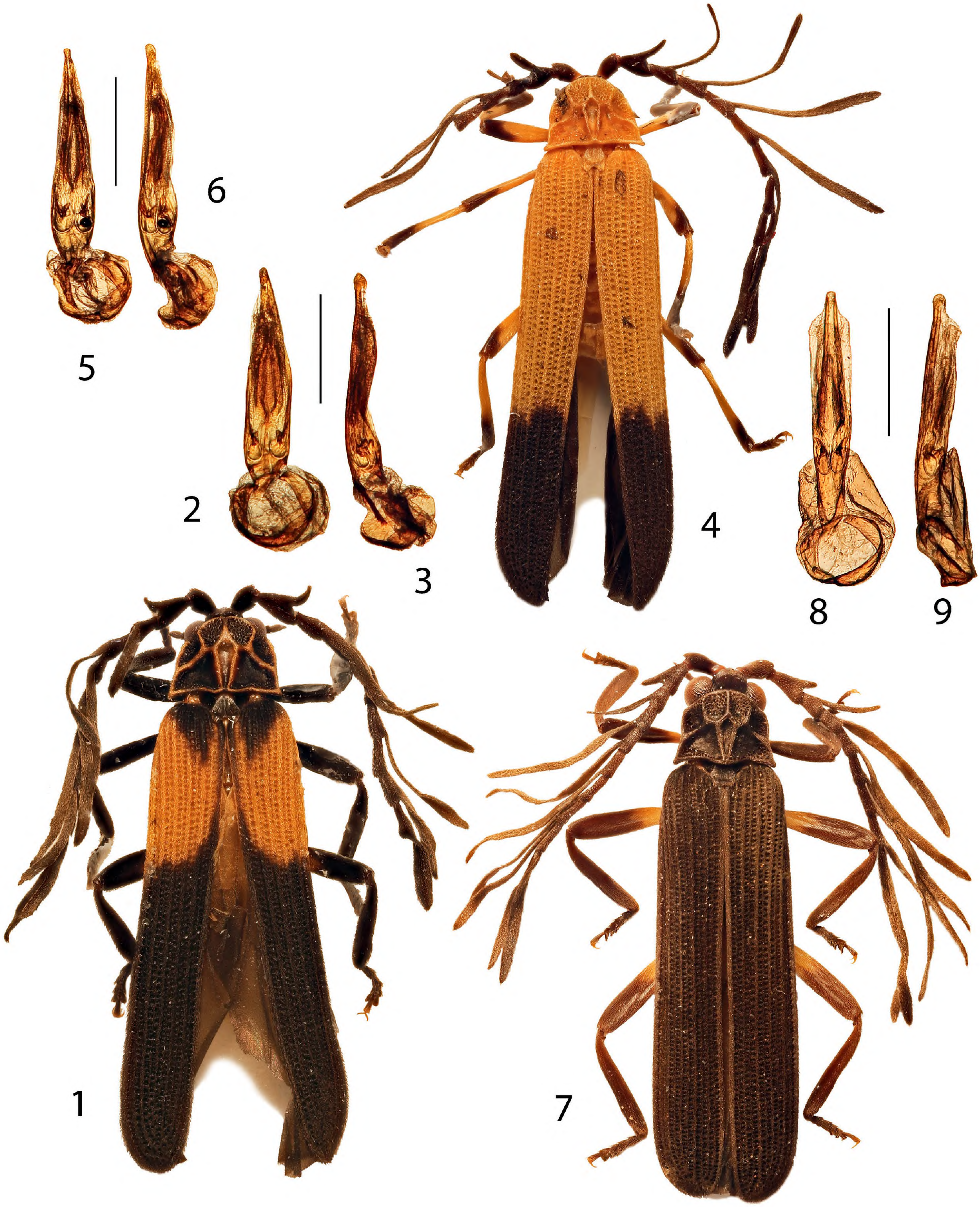
Figures 1-6. Habitus, dorsal view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. nabirensis* sp. nov.; 4-6 – *C. nimbus* sp. nov.; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi: 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

Plate 68

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



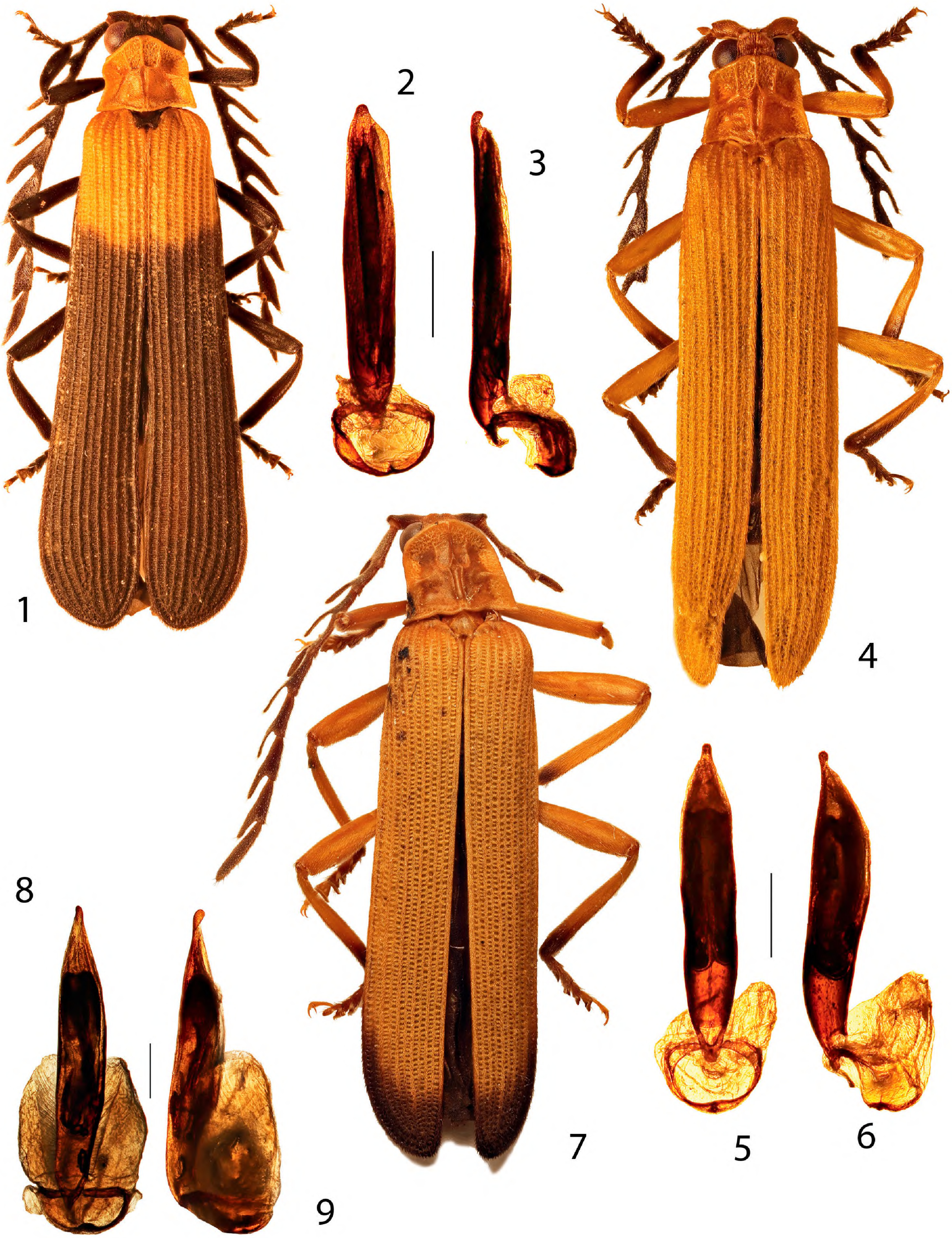
Figures 1-6. Habitus, dorsal view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. telnovi* sp. nov.; 4-6 – *C. weigeli* sp. nov.; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi: 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].



Figures 1-9. Habitus, dorsal view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. halmaheraensis* sp. nov.; 4-6 – *C. obiensis* sp. nov.; 7-9 – *C. carbonipennis* sp. nov.; 1, 4, 7 – Habitus, dorsal view; 2-3, 5-6, 7-8 – Aedeagi: 2, 5, 8 – Dorsal view; 3, 6, 9 – Lateral view [scale bar 0.5 mm].

Plate 70

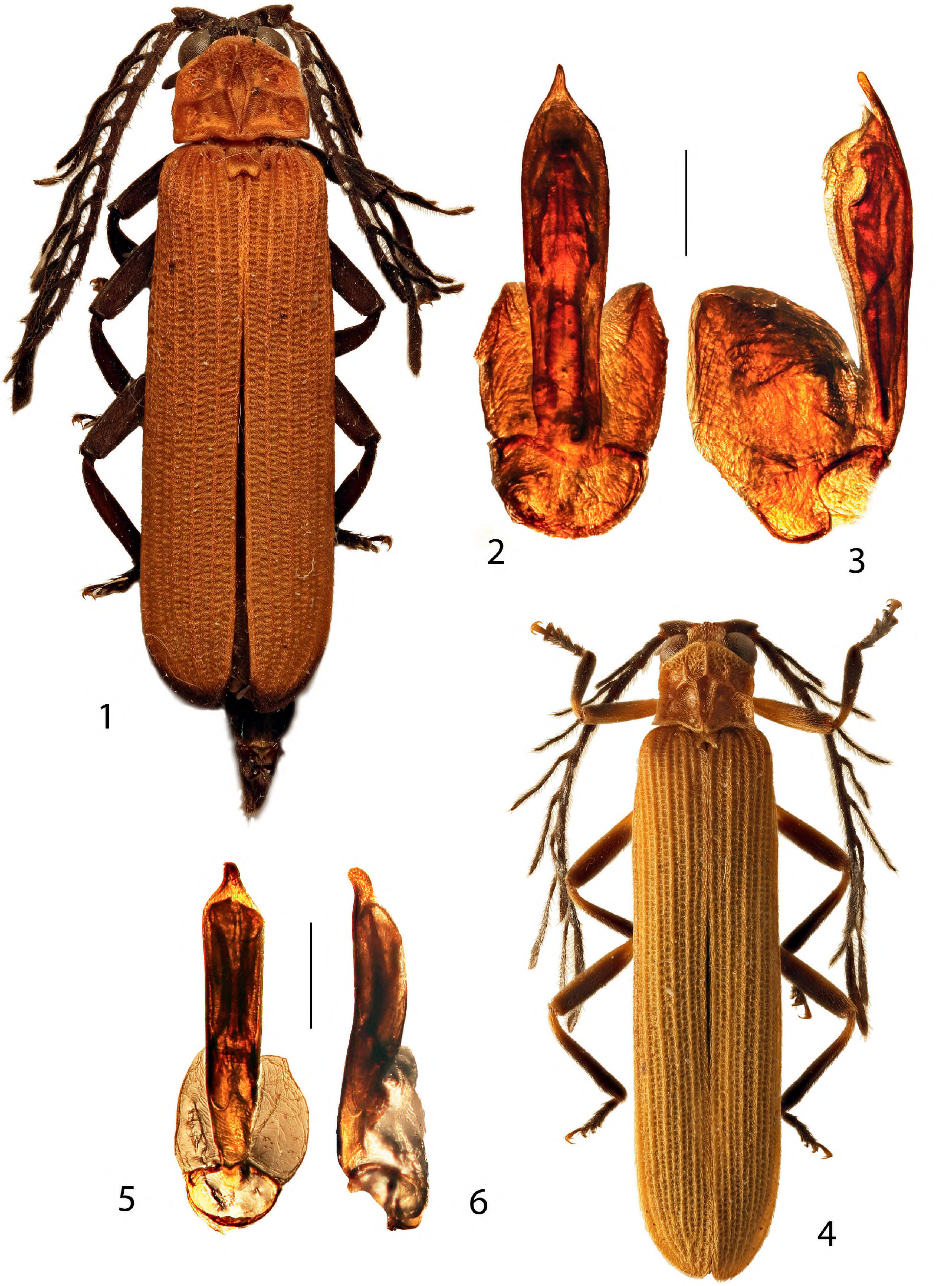
KAZANTSEV, S.V., TELNOV, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-9. Habitus, dorsal view and aedeagi of *Cladophorus*, holotypes ♂♂. 1-3 – *C. tertius* sp. nov.; 4-6 – *C. anggiensis* sp. nov.; 7-9 – *C. pusspenssatensis* sp. nov.; 1, 4, 7 – Habitus, dorsal view; 2-3, 5-6, 8-9 – Aedeagi: 2, 5, 8 – dorsal view; 3, 6, 9 – Lateral view [scale bar 0.5 mm].

Plate 71

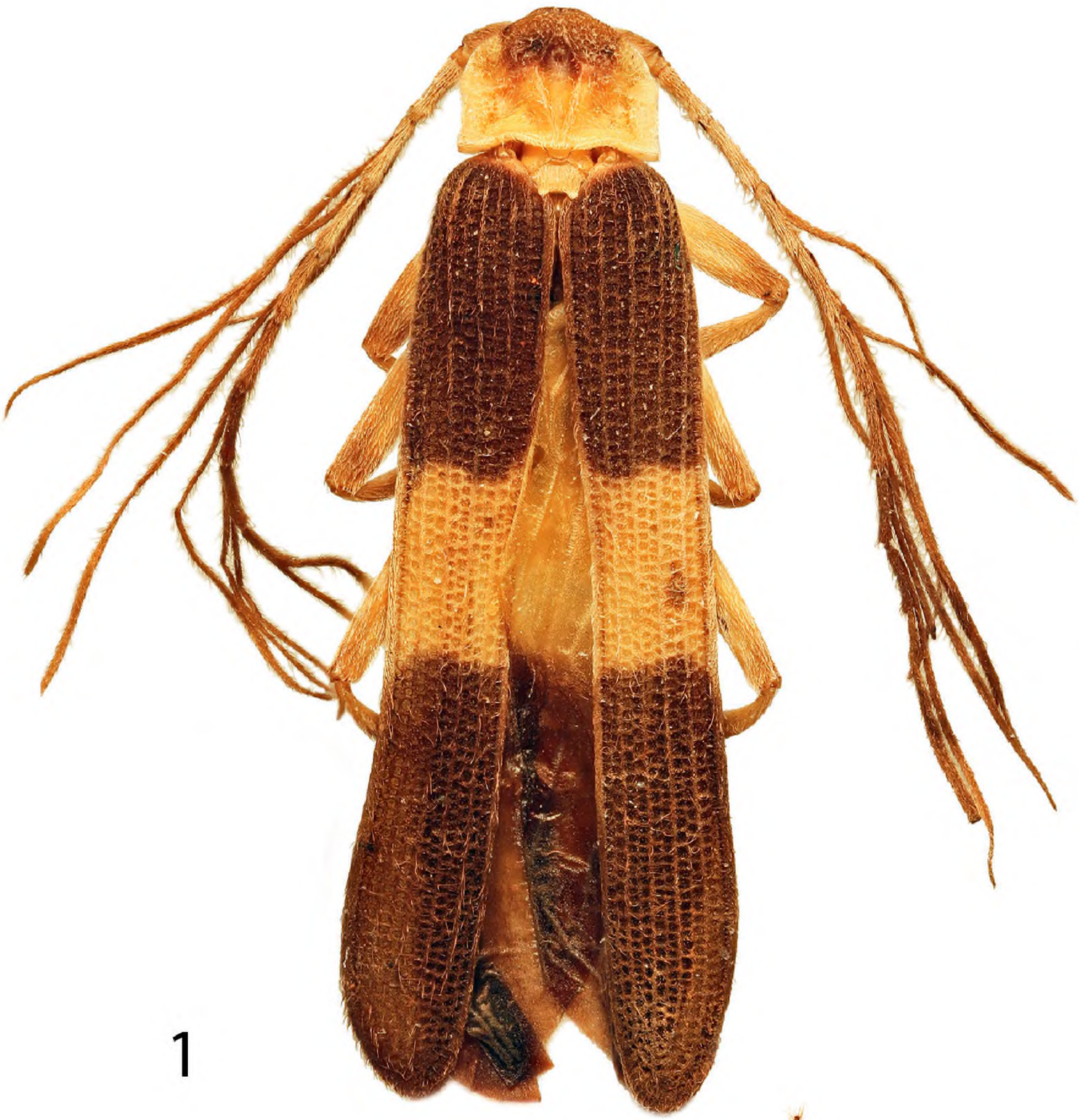
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-6. Habitus, dorsal view and aedeagi of *Pseudodontocerus*, ♂♂. 1-3 – *P. fuscatus* (Waterhouse, 1879); 4-6 – *P. gigilacus* sp. nov., holotype, ♂; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi: 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

Plate 72

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



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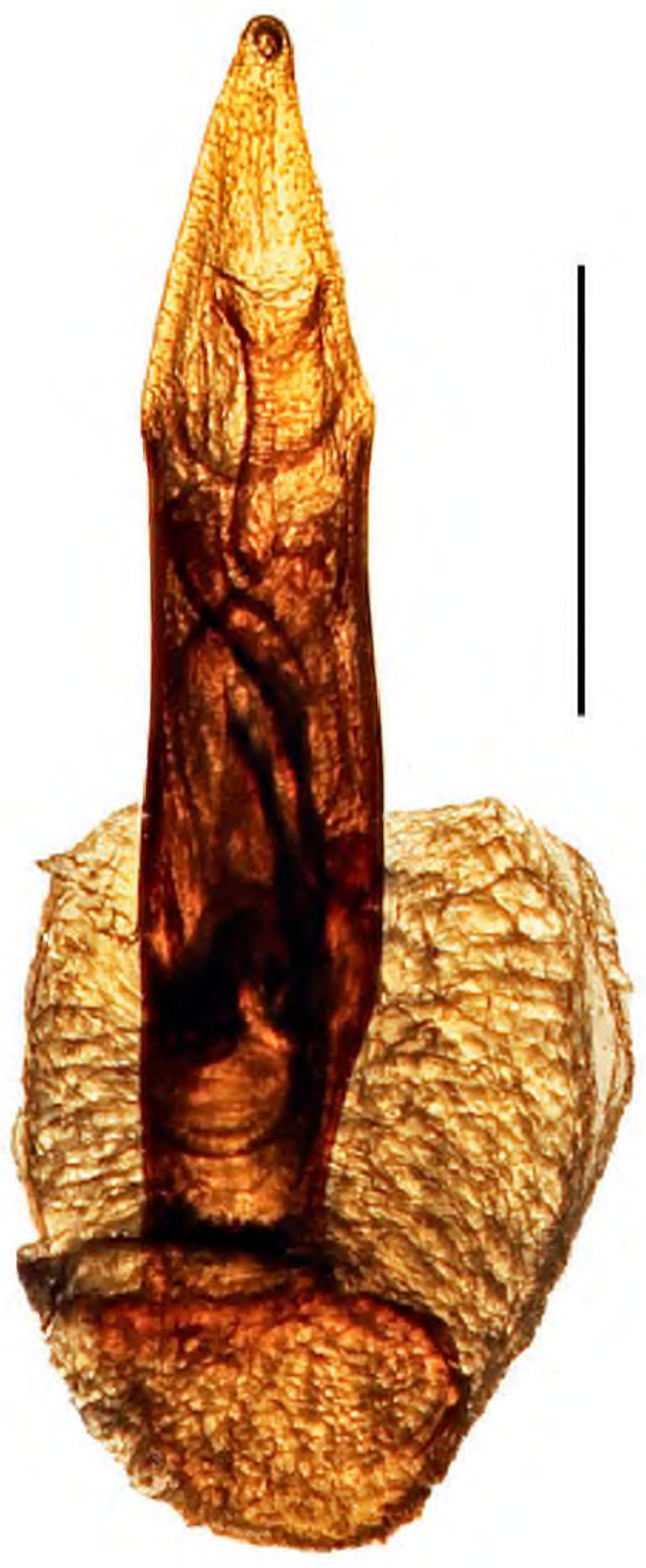

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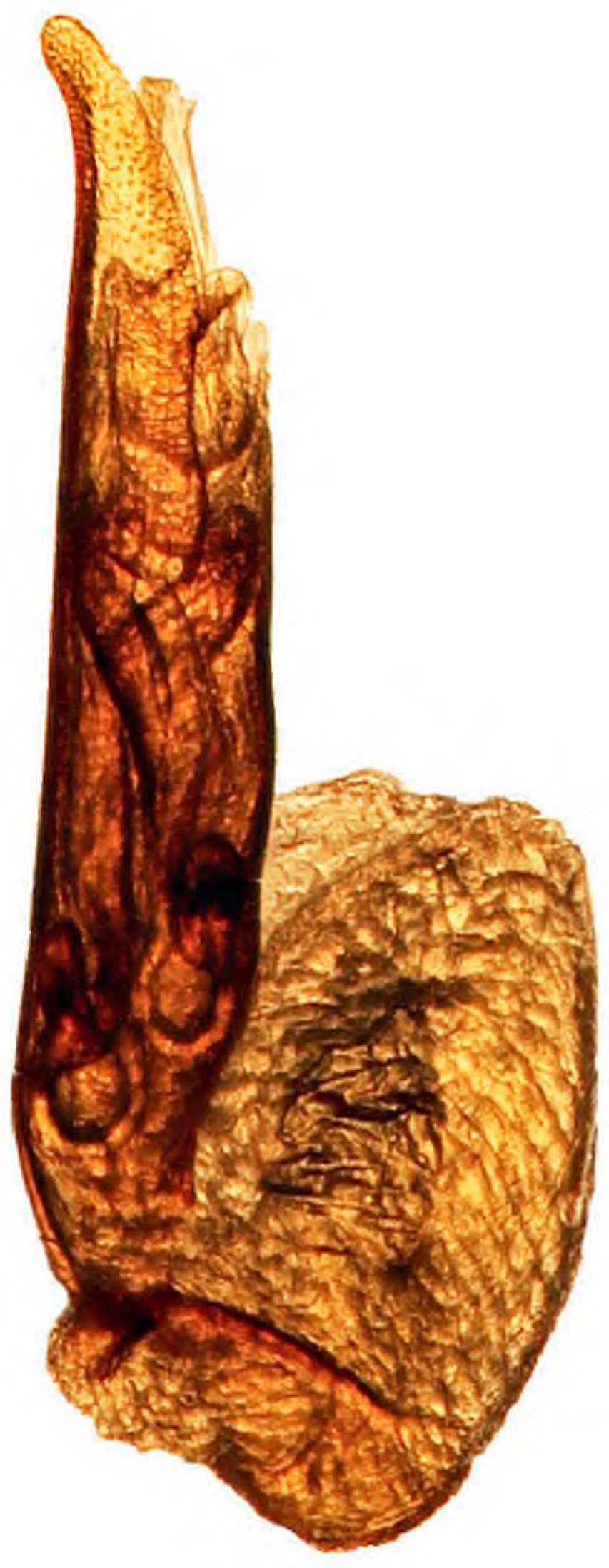

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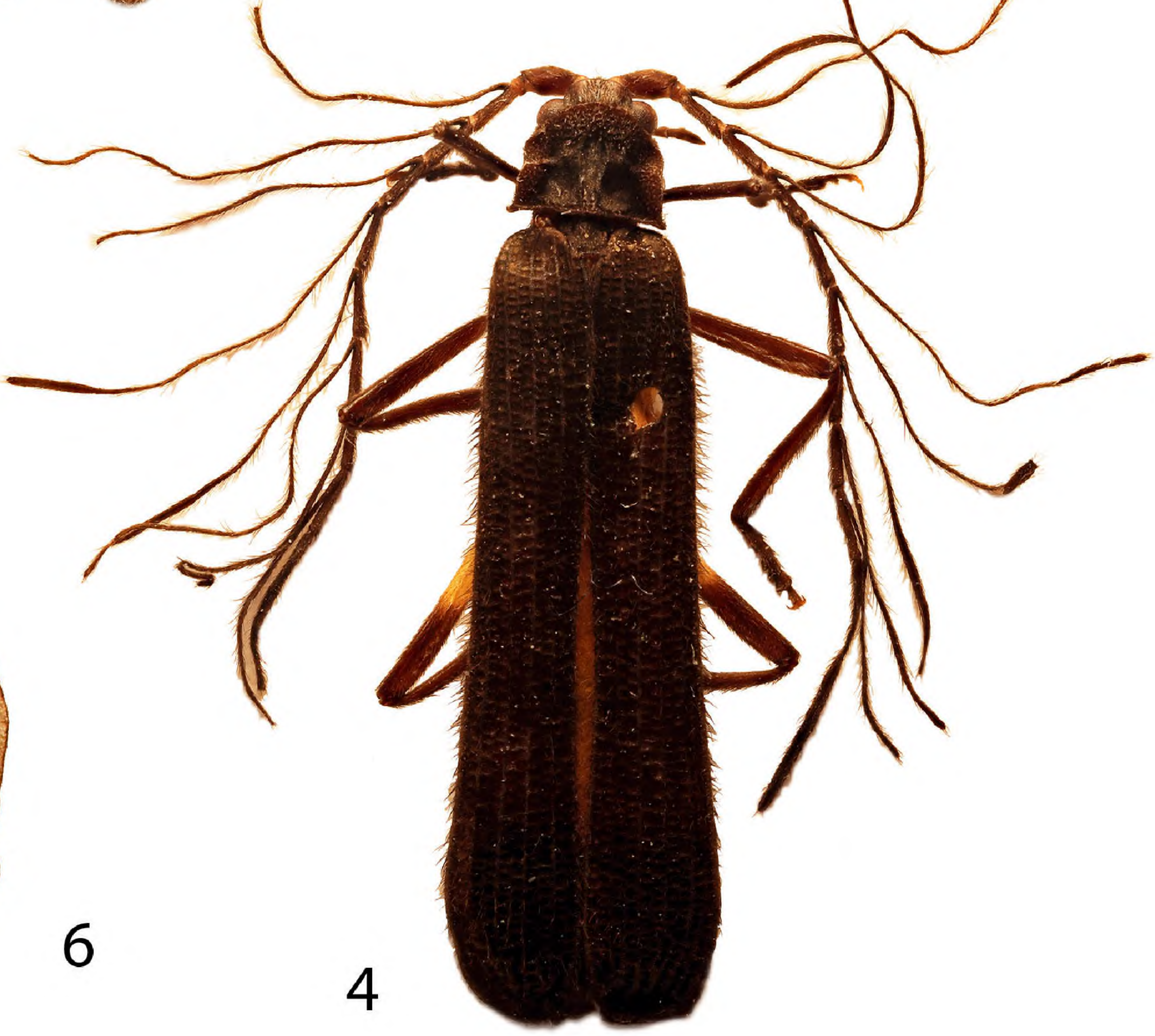

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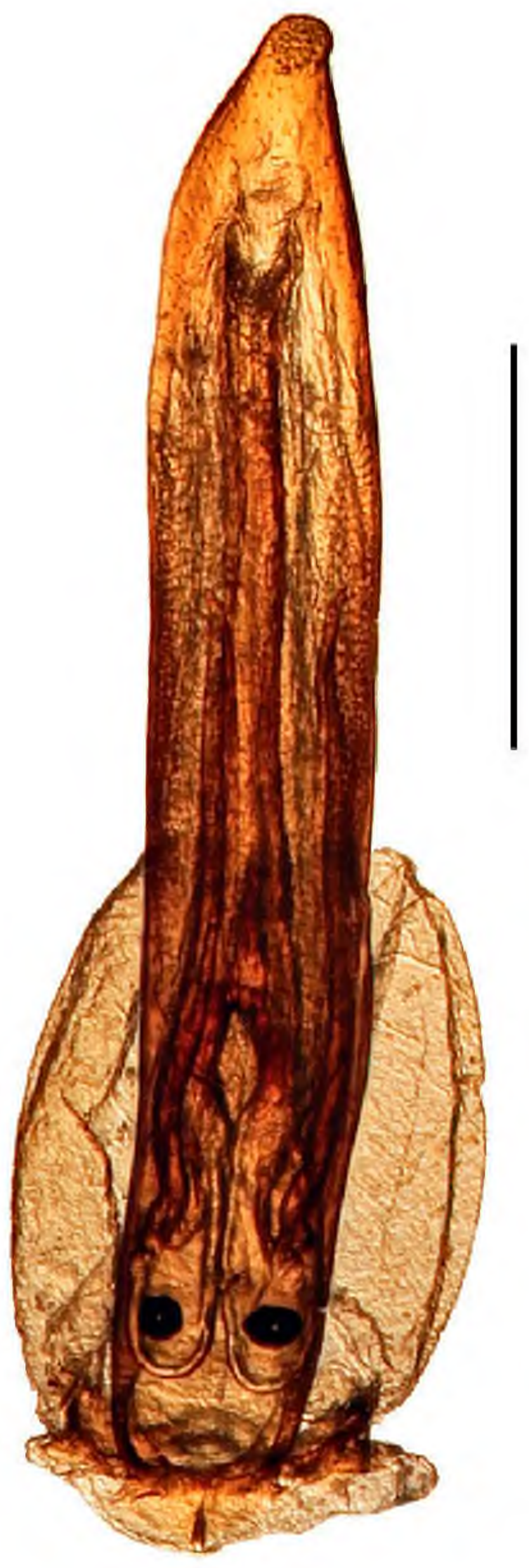

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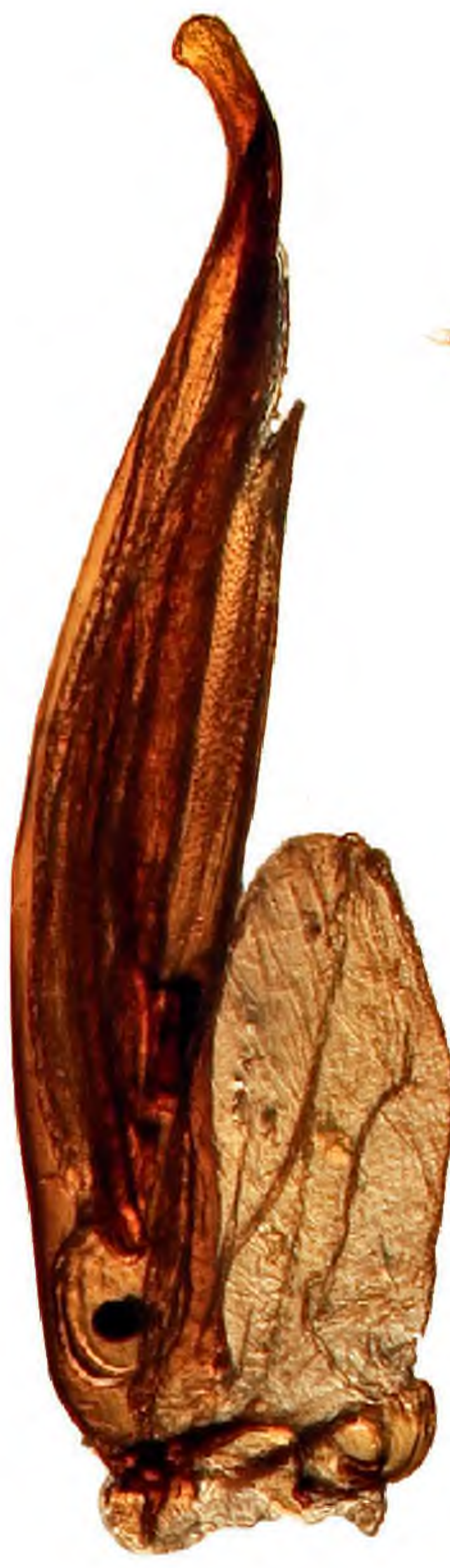

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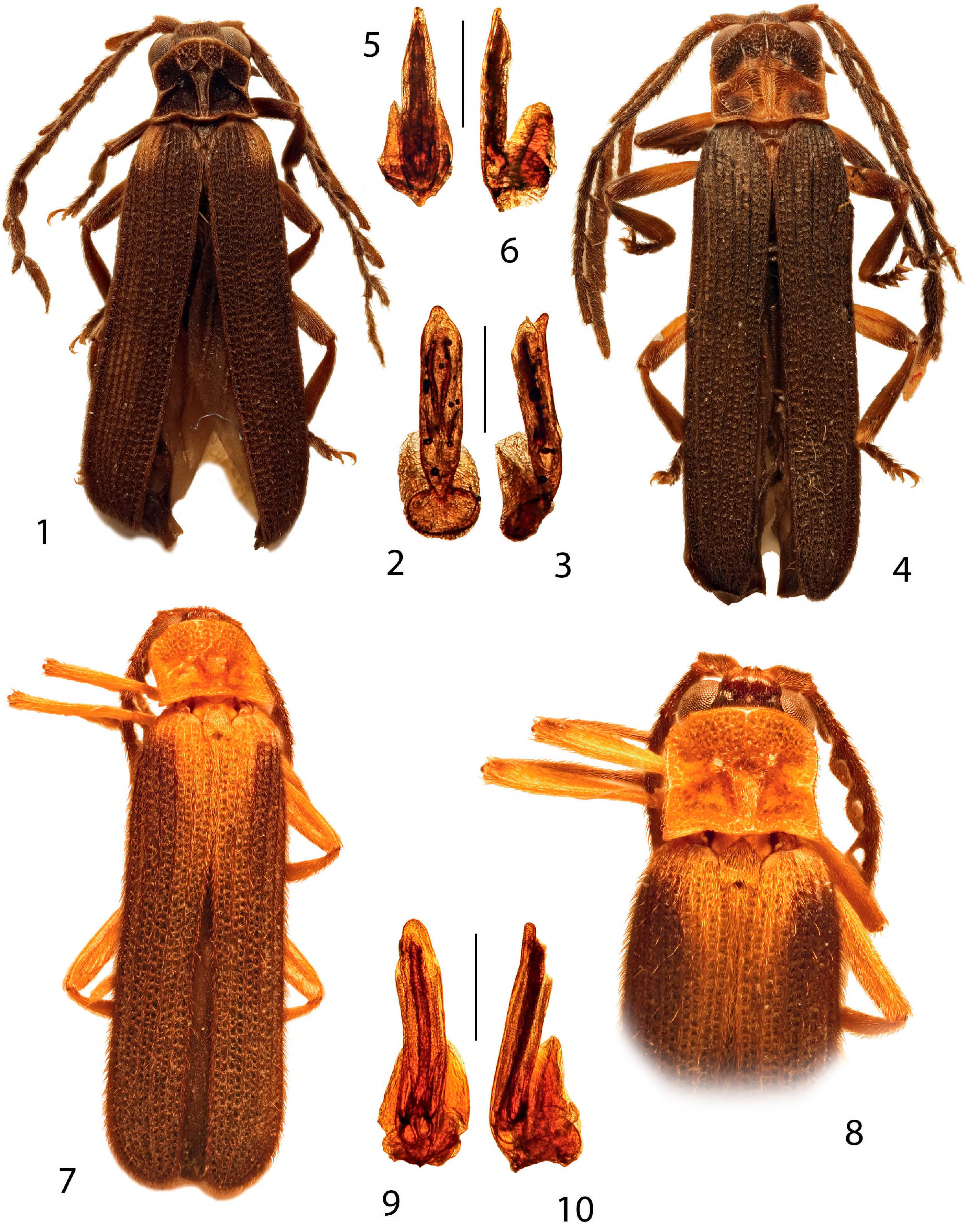
Figures 1-6. Habitus, dorsal view and aedeagi of *Pseudodontocerus*, holotypes ♂♂. 1-3 – *P. hilaris* sp. nov.; 4-6 – *P. incultus* sp. nov.; 1, 4 – Habitus, dorsal view; 2-3, 5-6 – Aedeagi: 2, 5 – Dorsal view; 3, 6 – Lateral view [scale bar 0.5 mm].

Plate 73

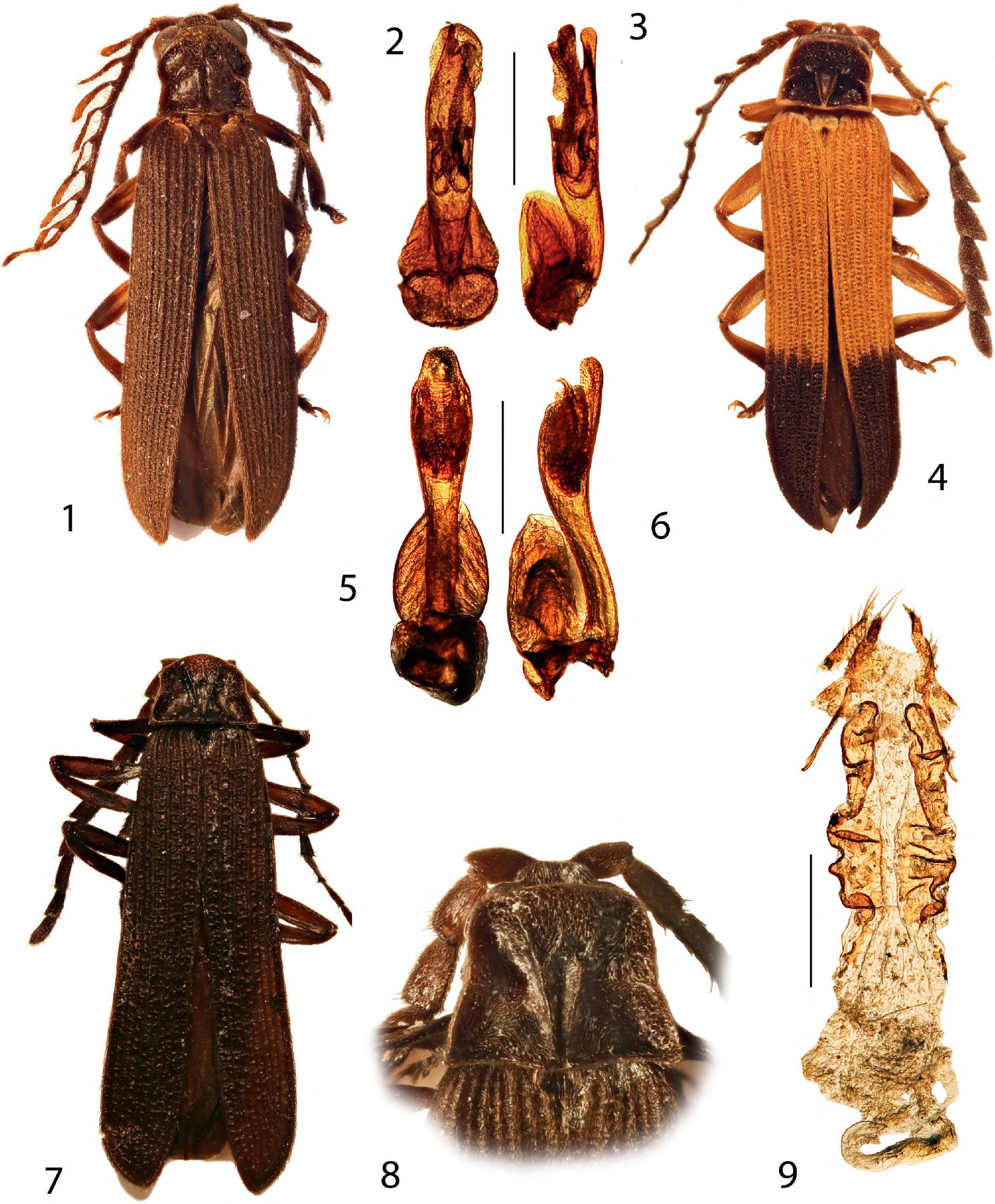
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-10. Habitus, dorsal view and details of *Pseudodontocerus*, holotypes ♂♂. 1-3 – *P. maculihumeralis* sp. nov.; 4-6 – *P. variicornis* sp. nov.; 7-10 – *P. villosus* sp. nov.; 1, 4, 7 – Habitus, dorsal view; 8 – Anterior part of body; 2-3, 5-6, 9-10 – Aedeagi: 2, 5, 8-9 – Dorsal view; 3, 6, 10 – Lateral view [scale bar 0.5 mm].

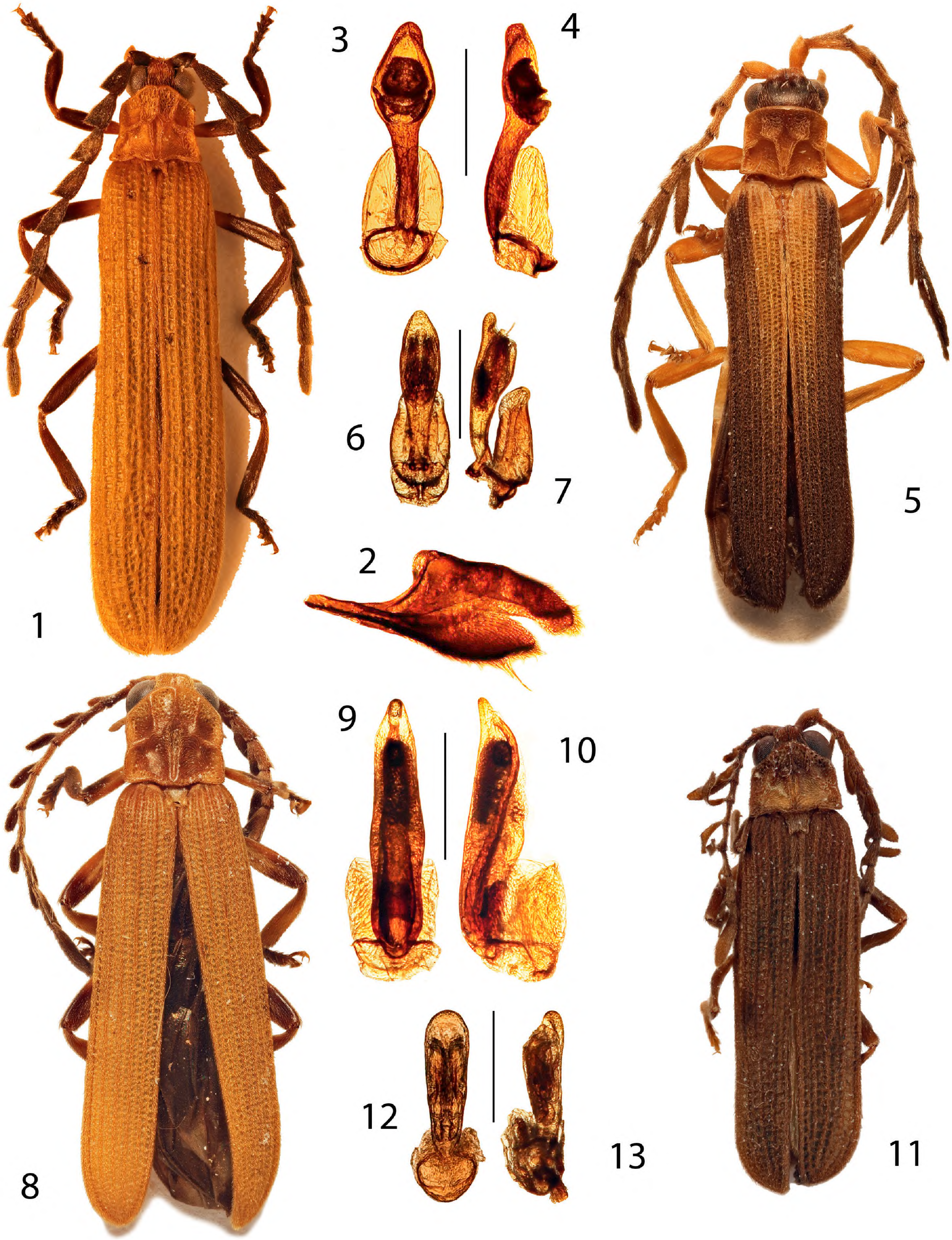
Plate 74

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-10. Habitus, dorsal view and details of *Cautires*, holotypes. 1-3 – *C. brunneus* sp. nov.; 4-6 – *C. dituaoides* sp. nov.; 7-10 – *C. eniclasoides* sp. nov.; 1, 4, 7 – Habitus, dorsal view; 8 – Pronotum; 2-3, 5-6 – Aedeagi: 1-6 – ♂♂; 7-9 – ♀; 2, 5, 8-9 – Dorsal view; 3, 6 – Lateral view; 9 – ♀ genitalia [scale bar 0.5 mm].

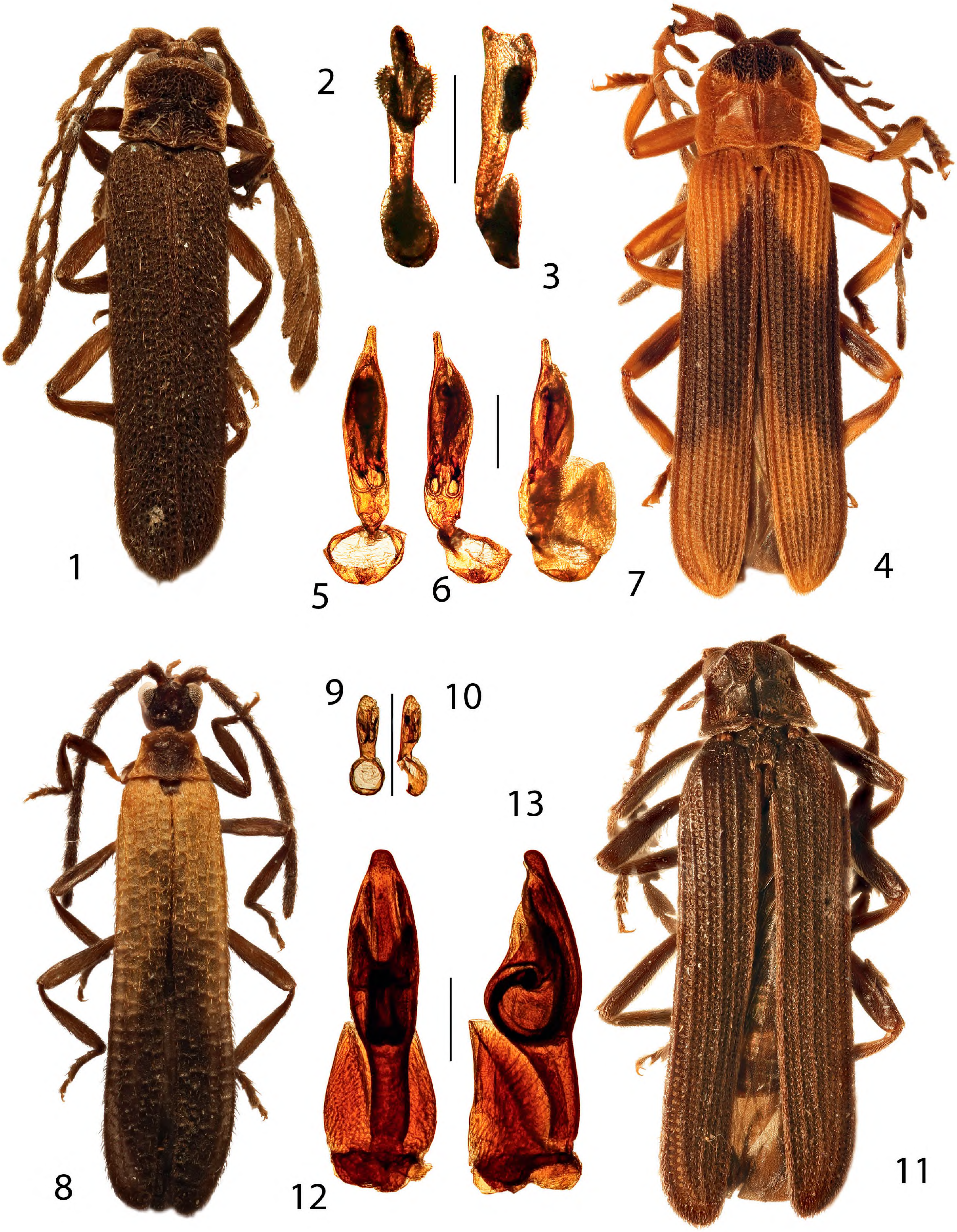
Plate 75



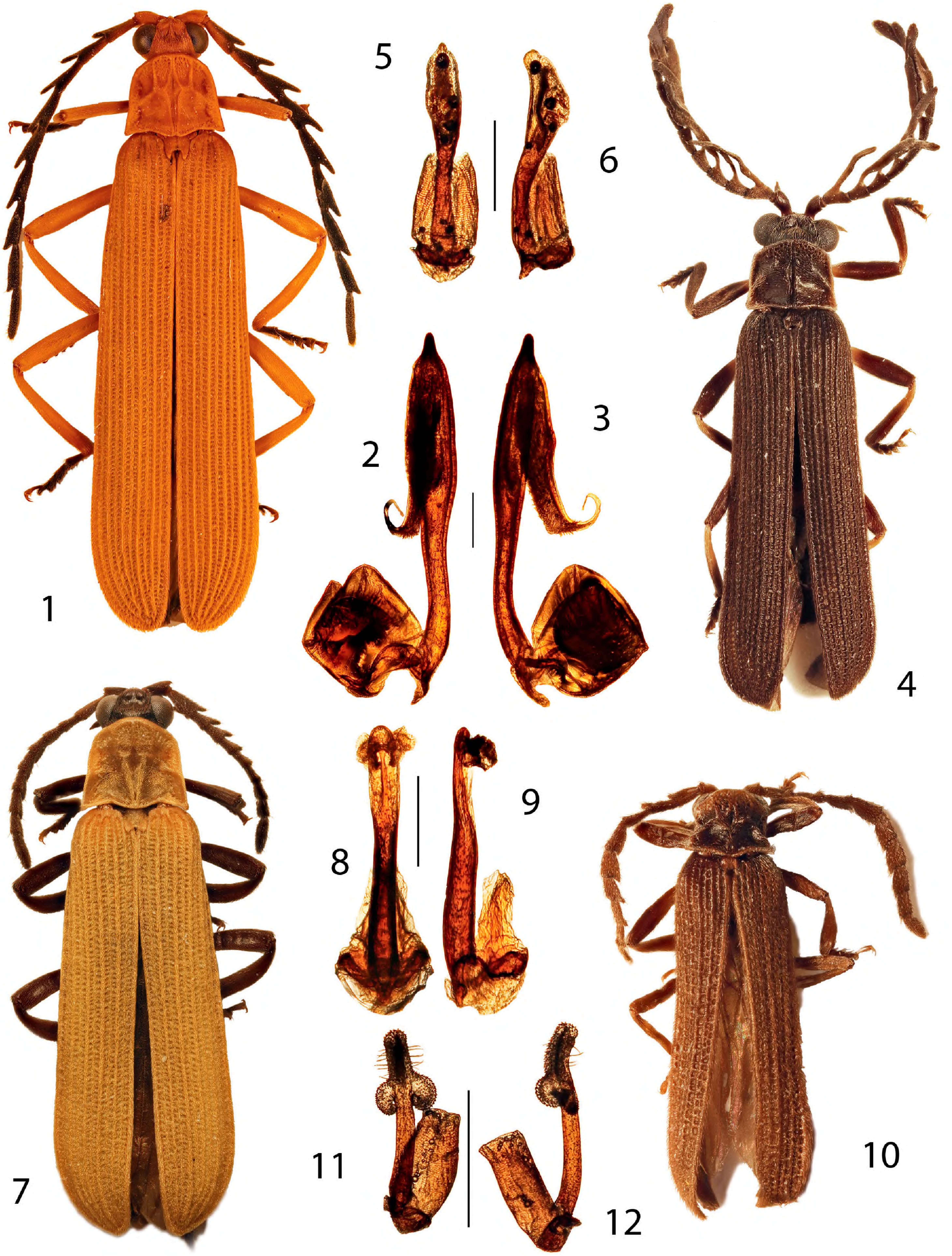
Figures 1-13. Habitus, dorsal view and details of *Cautires*, ♂♂. 1-4 – *C. extraneus* sp. nov.; 5-7 – *C. ignotus* sp. nov.; 8-10 – *C. maturnus* Kleine; 11-13 – *C. miklukhomaklaii* sp. nov.; 1, 5, 8, 11 – Habitus, dorsal view; 2 – Ultimate ventrites; 3-4, 6-7, 9-10, 12-13 – Aedeagi: 1-7, 11-13 – Holotypes; 3, 6, 9, 12 – Dorsal view; 2, 4, 7, 10, 13 – Lateral view [scale bar 0.5 mm].

Plate 76

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



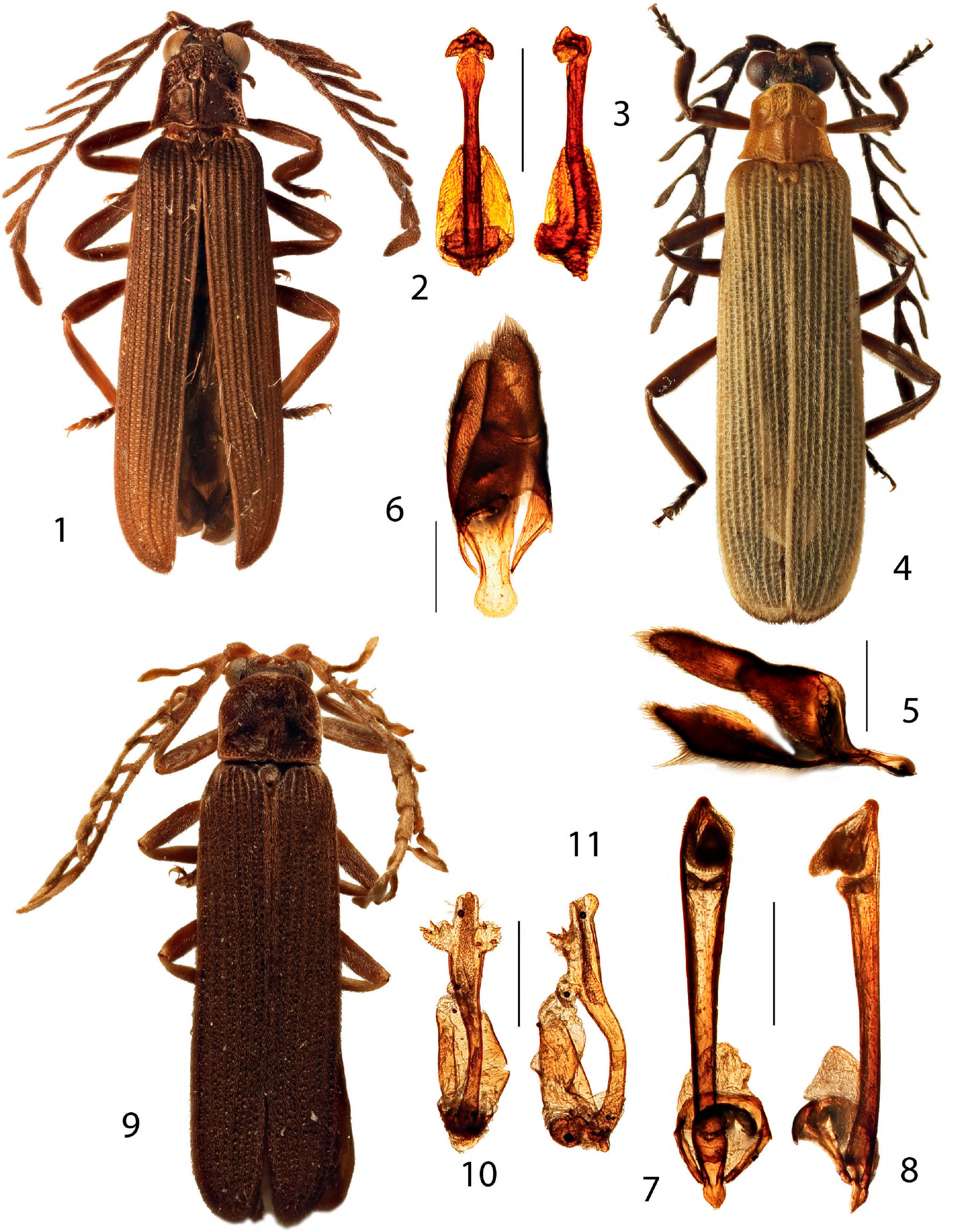
Figures 1-13. Habitus, dorsal view and aedeagi of *Cautires*, *Malacolycus* and *Metriorrhynchus*, holotypes ♂♂. 1-3 – *C. picipennis* sp. nov.; 4-7 – *C. tricoloripennis* sp. nov.; 8-10 – *Malacolycus gigiensis* sp. nov.; 11-13 – *Metriorrhynchus cochleiformis* sp. nov.; 1, 4, 8, 11 – Habitus, dorsal view; 2-3, 5-7, 9-10, 12-13 – Aedeagi: 5-6 – With removed phallobasal membrane; 2, 5, 9, 12 – Dorsal view; 3, 6-7, 10, 13 – Lateral view [scale bar 0.5 mm].



Figures 1-12. Habitus, dorsal view and aedeagi of *Metriorrhynchus* and *Porrostoma*, holotypes ♂♂. 1-3 – *M. uperensis* sp. nov.; 4-6 – *M. vitiosus* sp. nov.; 7-9 – *P. cautiromimum* sp. nov.; 10-12 – *P. exile* sp. nov.; 1, 4, 7, 10 – Habitus, dorsal view; 2-3, 5-6, 8-9, 11-12 – Aedeagi: 2, 5, 8, 11 – Dorsal view; 3, 6, 9, 12 – Lateral view [scale bar 0.5 mm].

Plate 78

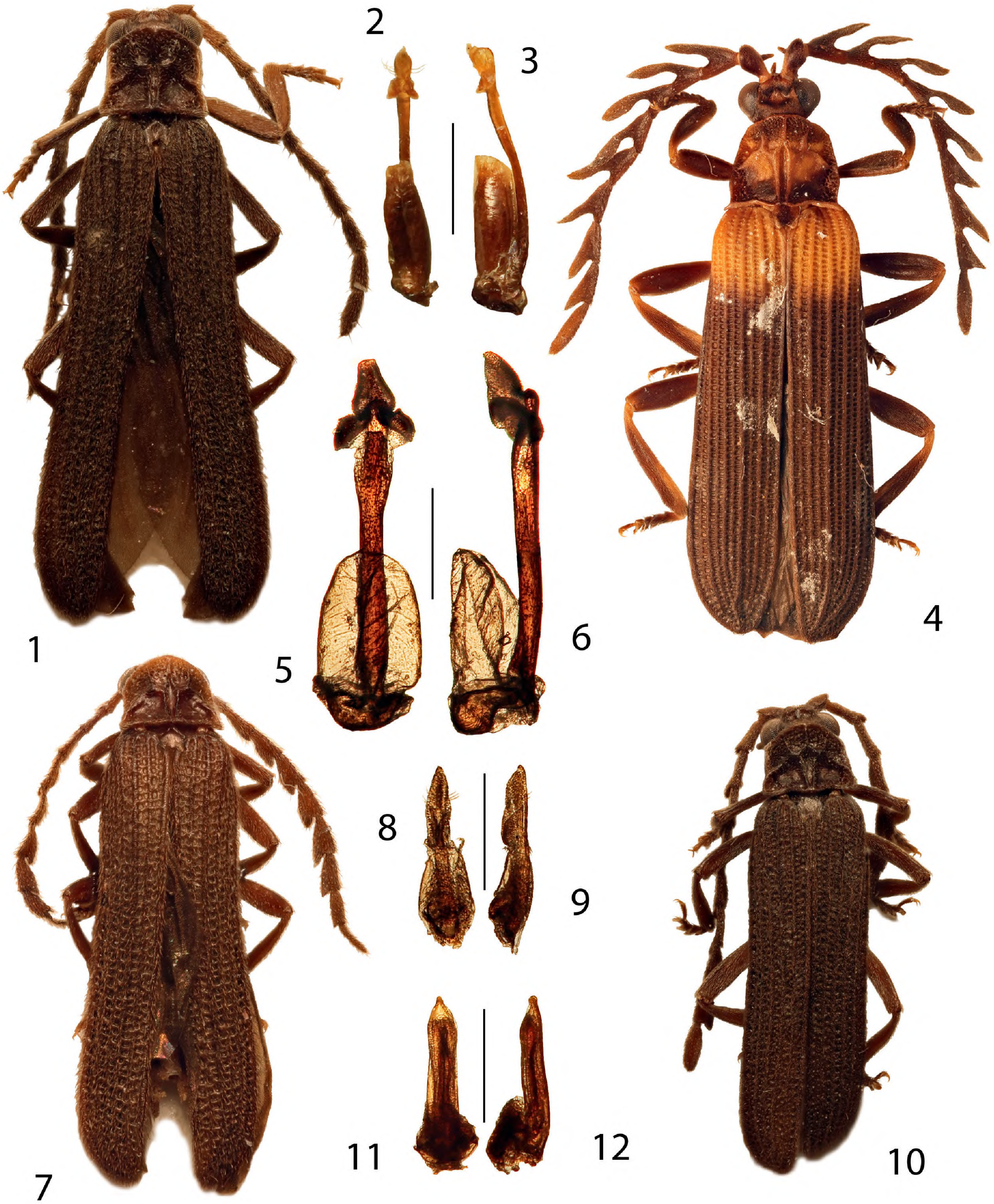
Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-11. Habitus, dorsal view and details of *Porrostoma*, holotypes ♂♂. 1-3 – *P. fuscum* sp. nov.; 4-8 – *P. gigivagum* sp. nov.; 9-11 – *P. mutum* sp. nov.; 1, 4, 9 – Habitus, dorsal view; 5-6– Ultimate ventrites; 2-3, 7-8, 10-11 – Aedeagi: 2, 6-7, 10 – Dorsal view; 3, 5, 8, 11 – Lateral view [scale bar 0.5 mm].

Plate 79

Kazantsev, S.V., Telnov, D.: A mimetic assemblage of net-winged beetles (Coleoptera: Lycidae) from West Papua



Figures 1-12. Habitus, dorsal view and aedeagi of *Porrostoma* and *Procautires*, holotypes ♂♂. 1-3 – *Porrostoma mystax* sp. nov.; 4-6 – *Porrostoma semiflavum* sp. nov.; 7-9 – *Procautires cirratus* sp. nov.; 10-12 – *Procautires fuscicolor* sp. nov.; 1, 4, 7, 10 – Habitus, dorsal view; 2-3, 5-6, 8-9, 11-12 – Aedeagi: 2, 5, 8, 11 – Dorsal view; 3, 6, 9, 12 – Lateral view [scale bar 0.5 mm].